志高镜刊

Chigo'sMirror

志高空调

CHIGO

Feb.2011 The Twelfth Periodical 2011年02月 总第12期

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Green Revolution, We Are Ready !

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Written by Editorial Office 文/本刊编辑部

Now time is for 2011. The Chinese New Year is coming. In this happy festival time, we would like to take the chance to wish you from our bottom of heart good health, happy family, prosperous business and all the best in the coming New Year.
CHIGO is an enterprise full of passion and dreams, just like our name, "holding high aspirations". From the time CHIGO was founded, we have been dedicated to "building the best air conditioners all over the world". Our CHIGO people move forward steadfastly step by step during all these sixteen years. Now CHIGO has been developed into one of the first four enterprises in the AC industry. She has been awarded the title "Global green energy-saving and environmental-friendly air conditioner"; she has passed the verification of National Export Inspection Exemption by just one trial, grown against the financial crisis, and obtained "the golden passport of international exportation". CHIGO is capable to keep a growth rate higher than the average industrial level most of the years. During these sixteen years, so much heavy glory and uncountable success achieved, all are due to CHIGO people's unremitting hard work, persistent pursuit of excellence and continuous desire to challenge them.

时间指向2011年。在新春到来之际，中国农历春节即将来临，在欢庆喜腾的氛围里，我们衷心地祝愿您在新的一年心康体健、家顺人和、事业兴旺、心想愿成！

志高是一家富于激情和梦想的企业，正如我们的名字一样，志存高远。从创建之日起，我们就立志"造世界上最好的空调"。16个春秋，志高人脚踏实地一步一个脚印，迄今已经是业内四强企业之一。荣获联合国颁发"全球绿色节能环保空调"称号，在金融危机中逆势增长，一举通过国家出口免验审核，摘得"国际出口金牌通行证"的桂冠，多年销售增长高出行业平均水平……16载，沉甸甸的荣誉和数不清的辉煌成绩，都源于志高人孜孜不倦追求卓越、渴望挑战自我。

面对荣耀，我们自豪。同时，我们更加清醒地看到行业竞争的残酷，和对手对我们的围追堵截。知道荣誉和成绩得来不易，所以我们更加如履薄冰，更加尽职尽责，力争卓越，尽最大可能地满足市场和消费者对我们的需求。如何保持我们的优势与时俱进？如何保持我们稳健向上的发展速度？我们该如何改善自己的日常工作，从而为公司创造更多的价值？这些问题，每一个志高人每天都在思考。

We are very proud of the glory we achieved. Meanwhile, we are more aware of the cruelty of the competition in the AC industry. We could be no more conscious of the fact that our competitor are always sparing no effort to fight with us. Knowing that glory and success never come easily, we work more discreetly and responsibly with more effort so that we could meet the more demand possible from our customers and the market. How to maintain our advantage and advance with the times? How to keep our steadfast growth? How to improve our daily work and make more profit for our company? Questions like these are what each of our CHIGO people is thinking about every day.
Today, with the booming of the low-carbon environmental economy, inverter air conditioners have been the hot spot in the industry. In this green revolution, each factory in the AC industry wants to grab the opportunity once in a million with the purpose to make more profit in this new field. CHIGO seems to be a new comer in the inverter field. However, as a matter of fact, we have been prepared for it for a long time. As early as the very beginning of the year 2010, regarding to our inverter series, we guaranteed to all our customers that within one year, if any quality problem that is not artificially caused arises, the inverters could be recalled unconditionally. In the same year, we quickly released an inverter type with the highest EER 8.36 all over the world. Moreover, we also developed a kind of fixed frequency air conditioner with EER as high as 5.0 to meet the market demand. Behind this success, there are profound and full preparation made in the field of quality, research and development and the market.
In order to provide you with an in-depth understanding of the preparation and effort we have made on the inverter air conditioner, in this phase of Chigo's Mirror, our editor has interviewed the manager of the Finished Product Inspection Division in the quality center, Mr Zhao Guoyi, and we are going to show you how we have put the idea "Excellent quality, CHIGO made" into practice in our daily life. At the same time, we have also brought about a special topic INVERTER AND CHIGO, hoping to display you the overall hard work that CHIGO has conducted in the inverter field and let you know our stories behind the development of inverter technology. There are more wonderful stories in need of your careful reading and appreciation.
As to our CHIGO people oriented by the champion spirit, challenges always make us extremely excited and heart-burning. Because of challenges, we keep surpassing ourselves and become better and better, stronger and stronger, and more and more updated. The glory and success have brought us endless confidence but more responsibility meanwhile. We truly believe with our increasingly strong and powerful foundation, with the endless confidence and faith of our GHIGO people, it's no doubt that we could run into a promising future with more excellence and more glory.

在今天，随着低碳环保经济热潮兴起，变频空调成为行业瞩目的热点。在这场绿色变革里，业内每一个厂家都冀望把握这千载难逢的机遇，欲在这片新蓝海里分一杯羹。我们也为此作了长久的准备。早在2010年初，针对旗下的全系列变频空调，我们发布了"一年内因非人为的质量问题可无条件召回"的品质宣言。同年，我们迅速推出全球最高能效比8.36的变频空调，还有能效比高达5.0的定频空调响应市场需求。这些成绩的背后，是我们在品质、研发和市场方面都做了充分而长远的准备。

为了让您深入了解我们在变频空调上所作的准备和努力，这一期《志高镜刊》编辑为您采访品质中心成品检验部部长赵国义，为您展现我们在日常工作中都是如何实践"精品品质，志高制造"的理念。同时，我们还策划《变频空调与志高》一专题，为您全面展现志高在变频方面所做的努力，了解志高变频技术发展背后的故事。更多精彩的故事，需要您一一细心品味。

对于以冠军精神为旗帜的志高人来说，每一次挑战都让我们热血沸腾、激动不已。因为有挑战，我们才能不断超越以往，成为那个更好、更强、更新的自己。过去的辉煌成就带给我们无限信心，同时亦赋予我们更多责任。我们深信，凭借我们日益雄厚的根基，凭借志高人上下一心的坚定信念，在这场绿色变革中，我们一定能跑出更优秀的成绩，赢得更辉煌的未来！

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Exhibition Information
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Our company will take part in CLIMATIZACION 2011 at Madrid Convention Center on March 1 - 4 2011. Booth No. is Hall 10 C24. Welcome friends from all over the world.

我司将于2011年3月1日–4日参加马德里国际展览中心举行的西班牙国际空调、暖通及制冷展，展位号10号馆 C24

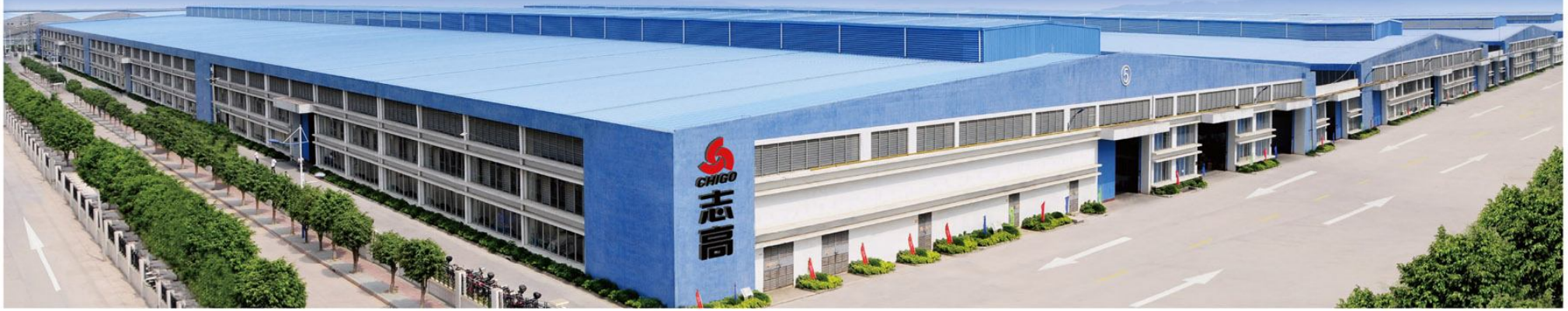
敬请全球朋友光临！

总裁专栏/ President's Word

How to Create A World Super-class Enterprise

狠抓四好建设，创造超一流企业

Written by Li Xinghao 文/李兴浩



Sixteen year-old CHIGO, though hasn't reached the age of a true grown-up---thirty years old, she has achieved a lot of success that is enough to proud. However, if we really think that way, we could just be more and more distant from the true success. Is it the result and future we really want? We must be prepared for the long-lasting hardship, be brave enough to suffer some loss and sacrifice for other's success to manage an enterprise, especially a manufacturing enterprise. If we don't have such a strategic strength, no matter how hard we have worked, how much we have paid out, how many difficulties we have overcome, and how many strong competitors we have defeated, it will still be hard for us to develop into a world super-class manufacturer like those in Japan and Germany. I always think that it's not only the responsibility of all the shareholders but also the responsibility of all the staffs to make CHIGO a long-lasting and great cause. I would like to express a few opinions on how to manage an enterprise well hereinafter, and I hope every manager will study them carefully and every staff will donate good idea to build CHIGO into a more harmonious, more progressive and more outstanding enterprise.

One. Good culture is the gene for high performance

Management with high performance never manages to be away from driving force of an excellent culture. The culture of an enterprise is the unconditional respect and heartfelt identity to the organization system, management rules, group thinking and behavior norms. It is an integration of some prescriptive, standardized and text-oriented values and ideas. Once the system of culture is formed, it could be perennial, but it is not unchangeable. Therefore, the excellent enterprise culture lies in the scientific succession to the decent traditions, and the rational removal of some cultural sickness on the one hand; it also lies in the breakthrough and creation with the time on the other hand.

To cultivate a good group culture, we must not only be guided by the macro-culture of the general headquarter of the group, also we must practice based on the reality accordingly and dare to make breakthrough. Along the process, it's of the highest importance to guarantee the united value and the refreshing culture. On the contrary, joy-indulgence, short vision, slow reaction, laziness, conformism, lax discipline and wide arrogance are the big enemies to build a good group culture. We could never render a space and earth for them to grow! All managers should think carefully whether the team you lead has formed its own spirit and whether your team is running much ahead of other competitors in the field. You should judge whether your team is active enough; whether it is autocratic and dogmatic, or it is democratic; whether it's just a plate of

十六岁的志高，虽然尚不到而立之年，却创造了足以夸耀的成功。但是，如果我们真的这样想，离真正的成功只会越来越远，而这就是我们要的结果和前途吗？我们经营企业，尤其是经营制造型企业，必须要有长期吃苦的准备，必须要有埋头吃苦的准备，必须要有敢于吃亏的准备，还要有成就他人的准备。如果我们没有这样的战略定力，不管我们付出了多少努力，不管我们克服过多少困难，也不管我们战胜了多少强大对手，最终也很难成为像日本和德国的那些超一流世界级制造型企业！

我一直认为，将志高做成一项长期的、伟大的事业，不仅仅是全体股东的责任，不仅仅是全体干部员工的责任，同时也是全体合作伙伴的共同责任。下面，我想就如何做好企业谈几点看法，希望每一位干部都来认真研究和仔细探讨，希望每一位员工都来献计献策，将志高打造成一家更加和谐、更加进步、更加杰出的企业。

一、好文化是高绩效的基因

高绩效的经营，离不开卓越文化的背后驱动。企业文化就是企业成员对组织制度、运营规则和群体思维及行为范式的无条件敬畏和内心认同，是一套规范化的、文本化的价值理念取舍体系。文化体系一旦形成，可能会历久弥新，但并非一成不变。所以，卓越的企业文化，一方面在于对优良传统的科学继承，一方面在于过往文化弊病的理性剔除，另外一方面则在于结合时势的创新和突破。

我们要创造好的团队文化，不仅要有集团总部的宏观文化引导，更要有各个板块结合实际的身体力行和大胆创新，而保证统一的价值观和文化鲜活性是重中之重。而“贪图享受、目光短视、懒惰迟缓、因循守旧、纪律松散、狂妄自大”是建设优良团队文化的大敌，我们不能给它们一丝一毫的滋生土壤和发展空间！每位主管干部都应该认真地想一想，我们所带的团队，有没有形成自己的风骨，有没有自己的“精、气、神”，在同行竞争中是不是“顶呱呱”？是一潭死水，还是生龙活虎？是独裁武断，还是民主集中？是一盘散沙，还是钢铁长城？是各自为阵，还是系统协同？如果我们不能与时俱进，一线执行者没有思考能力和主动的临场决策及应变能力，企业极有可能被淘汰出局。

我认为，只要能够保证企业主战略不偏向，只要能够保证企业核心竞争力不断提升，只要能够保证产品和服务的不断增值，只要能够保证各相关利益方的核心利益和前途不被损害，一切陈旧过时的条条框框都可以打破重建，一切欠缺激励性的管理举措都可以快速革新，一切阻挡公司前进步伐的障碍都必须果断清除！

sand, or a strong Great Wall of steel; whether it has been disperses to small team, or it is systematically united. If our executors at the front line do not have the capability to think creatively and to take action promptly and actively, and if we could not make progress with the time, it's very possible for the enterprise to be defeated and washed away in the stream of competition.

In my opinion , as long as the orientation of the main enterprising strategy is maintained, as long as the continuous increasing core competitive strength of the enterprise could be made sure, as long as products and service could be guaranteed to add value and make profit, as long as the core interest of each related party and their future won't be harmed, all those antiquated frames could be broken and rebuilt; all those managing measures that are short of incentives could be renewed fast; all those obstacles blocking the way we move forward must be removed decisively!

Two. Good strategy is the navigating light of high performance

High performance management could never be away from tthe correct guidance. Strategy is the navigating light of the management of an enterprise. Strategy is the existence logic, developing path and management plan in the condition of competition. It intently reflects the highest wisdom of the management team in the aspect of making decision.

That a company could survive and develop and become a strong one, relies absolutely not on a few accidental opportunities. It has its own cultural philosophy and its accurate strategy. Likewise, if a sales department or a functional department could be competitive enough among others in the same occupation; it must possess its own cultural philosophy and adapted strategy. There must be some sub plans and sub strategies after a general strategy. Also it's a must to let everyone become the driving force to carry out the general strategy.

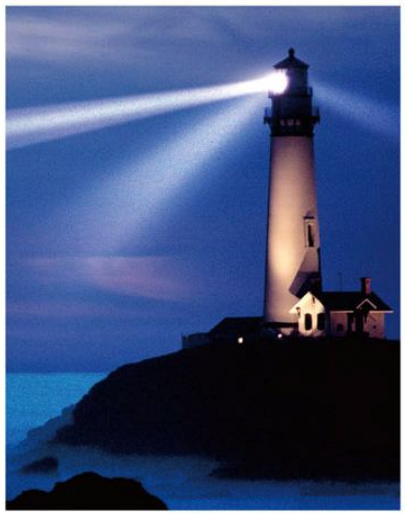
As the first responsible person of a sales department or a functional department, have we truly understood and studied the general strategy of CHIGO? Have we put forward some valuable suggestions for this strategy? Do we really know the reason why we have to make this strategy, not the other one instead? Have we ever understood why we have to put the first priority to realize this goal, not the other one instead? Are we aware why we have to locate the resources firstly in this field, not the other one instead? Are we clear about the due plan and strategy for our own responsible field to realize the general strategy? Are these sub-plans and sub-strategies that we have already worked out available to meet the demand of the market and obtain the competitive advantages among other competitors in the industry? What kind of adjustment we ourselves should make and what we have to do to help other team members? If this kind of adjustment could not be conducted, what will be the result? How worse could it be? What will be result for our own and our department? What will it contribute to our other brother departments and the general strategy of our company? Only

二、好战略是高绩效的航灯

高绩效的经营，离不开战略的正确牵引。战略是企业经营全局的导航灯，战略是竞争条件下的生存逻辑、发展路径和经营策略，集中体现了经营团队在决策方面的最高智慧。

一个公司能够长期生存下来并发展壮大，绝对不是依靠数个偶然的机会，它一定有自己的文化哲学，更有它的正确战略。同样，一个事业部或者一个职能部门，如果能够长期发挥作用，在同行中保持足够的竞争力，也一定有它自己的文化哲学和相应战略。整体战略部署之后，一定要有多次级策略和战略延伸，并让每一个人都成为整体战略实现的动力单元。

作为事业部或职能部门第一负责人，我们真正去研究过志高的整体战略么？是否对志高整体战略部署提供过有价值的建议？是否了解过，为什么要这样部署，而不是那样部署？是否了解过，为什么优先实现这个目标，而不是那个目标？是否了解过，为什么资源投放优先在这个板块，而不是那个板块？是否了解过，为了整体战略的实现，自己所负责的板块应该有怎样的策略和战略？这些次级策略和战略是否能真正满足市场的需要，是否能够在同行竞争中具有领先优势？自己应该做哪些调整，自己应该协助团队成员做哪些调整？如果不做这些调整，一般后果是什么，最严重的后果又是什么；对自己或自己部门的后果是什么，对兄弟部门和公司整体战略又是什么？我们只有不断地提问题，不断地提开放式问题，找出尽可能多的解决方案，从中找出一条最适合自己的策略发展路径，这便是主管干部们制定战略的必修功课。



by raising questions all the time, by always raising open questions, could we find more ways possible to solve problems, and find the best way for strategic development. This is the lesson that managers must learn to make strategies.

Three. Good brand is the sail of high performance

Good brand is the good business reputation accumulated during the management process of the enterprise. It is a very important invisible asset. Everyone knows a good brand could bring an enterprise great value and profit. However, that how to manage a good brand, and what kind of responsibility and task that we must shoulder, is what we must pay attention to.

A good brand of an enterprise requires the united effort and enduring maintenance of all the members of the company and its business partners to appreciate the brand as the time goes by. The cultivation of the culture of an enterprise must involve all staff into the management, likewise the brand building program. It could not be realized just with the effort from one center. The brand center must consummate the publication, advertisement and service etc. at home and abroad, and besides guide the brand managing work from a strategic view. Moreover, we must improve continuously the staffs' awareness of brand, quality and beauty so as to perfect our work, make the excellence and win the champion. Only by doing that, could we win the in-depth agreement and identity from our customers. With a good brand, it will be much easier to achieve high efficiency and great performance!

Four. Good execution is the safeguard for high performance

All excellent enterprises require building prominent execution. Without prominent execution, an enterprise could not achieve high efficiency and good performance. To confront the stronger and stronger competitors and the more and more severe challenges from the market, it's very necessary for us to keep improving the systematic competitive strength, to better endlessly the quality of our products, to develop more profoundly the creativity of our products and to keep improving our service. We must take the most excellent competitor in the industry as the surpassing goal, meet the overall demand of the market and catch up with the updated speed. Our sales departments must conduct an in-depth analysis of customers' products, exert the advantages of our products, help customers to develop and grab more market share. Besides, a balance of interest and quantity must be drawn to provide our customers with enough support and help and encourage them to challenge themselves and give a full play to their potentials.

We should not bear the thinking of working once for all; we should not always think we are safe and stable without any threat; we should not regard ourselves as the VIP or hero to the success; we should not complain those internal or external pressure! As far as I am concerned, educational background, talent and experience should matter certainly

三、好品牌是高绩效的风帆

好的品牌是企业在经营过程中积累的优良商誉，更是企业最为重要的无形资产。大家都知道，好的品牌，能够为企业带来的巨大价值。但是，如何经营出好的品牌，自己在品牌建设中应该承担怎样的责任和使命，这才是我们更应该关注的课题。

一个好的企业品牌，需要全体成员以及合作伙伴的群策群力和长期维护，才能让品牌随着时间的流逝而不断增值。正如企业文化建设需要全员参与和融入运营当中一样，品牌建设工作也不仅仅是一个中心努力就能够承载得了的。品牌中心必须做好内外部传播和广告服务等工作，也必须从战略的高度来统领品牌管理工作，扎扎实实做好各项基础工作。但是，我们更需要不断提升全员的品牌意识、质量意识和审美意识，把工作做好做精，做出特色，做出冠军感觉，才能得到顾客的高度认同。只要有了好的品牌，实现高绩效便是水到渠成的事情！

四、好执行是高绩效的保障

每一个卓越的企业，都需要打造卓越的执行力。没有卓越的执行力，企业就不可能创造高绩效。面对越来越强劲的对手，面对越来越严峻的市场挑战，我们必须不断提升系统竞争力，我们必须不断提升制造后台的出品质量，努力加大产品创新力度，不断优化升级产品和服务，必须要以行业最优秀的对手为超越标杆，全面配合和满足市场创新的速度要求。而我们的市场业务部门，一定要把行业客户的产品分析透，一定将公司产品的长处发挥到最佳状态，帮助客户做大做强，平衡好量利，还要给予足够的支持和帮助，鼓励客户挑战自己的能力极限，将潜能发挥到极致。

to judge whether one is a true talent, but what matters most is the attitude to pursue progress and the courage to bring forth innovation. As long as he is responsible, as long as he is willing to pay out, as long as he would like to learn, as long as he makes effort, it's undoubtedly that he will be respected and put in an important position of the company. Good culture, good strategy, good brand and good execution are the indispensable significant symbols for a successful enterprise management. With regard to the four aspects above, we must ask ourselves how we have done on earth. What kind of value we have created? What obvious progress we have made? I hope that everyone could often examine himself and criticize himself. Also I look forward that all our CHIGO people could be more pragmatic and creative, persistently carrying out the improvement work. Our path will definitely be unlimitedly wider and wider, and our future will be endlessly better and better!

I believe we are always running on the avenue of creating excellence and winning the championship! As long as all CHIGO people work hard, as long as we adopt more scientific management, as long as we keep integrating market resources and financial resources, CHIGO will develop into a world super-class enterprise in the near future.

任何人都不要有一劳永逸的想法，任何人不要有四平八稳的想法，任何人都不要以功臣或元老自居，任何人都不要去抱怨来自于内外部的各种压力！在我看来，他是否是一个真正的人才，学历、天赋、经历和过往业绩固然重要，但最重要的是追求进步的心态和敢于创新的胆识。只要他肯负责，只要他肯付出，只要他肯学习，只要他肯努力，就一定会受到大家的尊敬，就有可能得到公司的重用。好的文化，好的战略，好的品牌，好的执行，是成功经营企业不可或缺的重要标志。对于上述四个方面，我们都要去扪心自问，自己到底做得怎么样？我们到底创造了什么样的价值？我们有哪些明显的进步？希望大家多做自我检查和自我批评，希望大家多做务实工作和创新工作，将改善工作持之以恒地延续下去，我们的道路一定会无限宽广，我们的未来一定会无限美好！

我相信，我们一直走在创造卓越的大路上，我们一直走在勇夺冠军的征程中！只要有了全体志高人的努力，只要我们采用更加科学的管理，不断整合市场资源和金融资源，在不远的未来，志高一定会成为超一流的世界级企业！

AC Industrial Report of Quarter 3, 2010
第三季度行业报告

Edited by Editorial Office 本刊编辑部整理

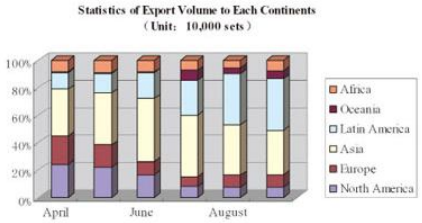
One. Summery

Low season arrived at the third quarter. Summer comes to Southern Hemisphere. Therefore the export decreasing, only Latin America and Oceanica were increasing. Compared with 2009 year, the export of low season of 2010 year still gain increased, but not back to the peak of 2008 year. For raw material, copper price used to drop but quickly upward climb again. Aluminium price keeps steady growth. RMB exchange rate has a strong appreciation at 3 quarter. The compressor and logistics resource are abundant at this quarter. Below is detail report.

Two. General Trend

The export volume of air conditioners in the third quarter is 8,565,311, greatly drop 79% compared with second quarter.

From below chart ,we could see that the demand of Asia is biggest ,then come to Latin America. Africa always hot so its need on AC is quiet stable ,even though at low season its need doesn't dramatically drop.



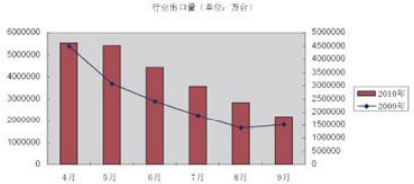
At second quarter, the import of North America is greatly increased because U.S.A has a hot summer and its need on AC being rising. On the other hand, the stock of buyer is gradually digesting so buyer begins new buying. However at third quarter, we see the export to North America is obviously dropped and most quantity was digested by U.S.A. For the bad weather, Canada doesn't have much need on AC product. For Europe, even though it still facing the challenge of financial crisis , the recovery of Europe at 2010 year will be the most outshine point for AC industry. Beneficial for hot weather, Russia, Italy, France and Turkey etc. country had a good sale at AC product. The requirement of Asia is stable that's why even though at low season, the export to Asia still has a good result. Brazil, Argentina and Mexico such new-rising country located at Latin America, and third quarter is the season for AC product. It is no rare that the export has a rapid growth. Oceania only has two countries, Australia

一、市场概述

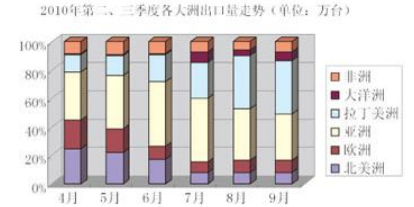
2010年第三季度，淡季效应全面凸现。南半球进入夏天，因此除大洋洲、拉丁美洲外，各大洲出口量均下降。与2009年对比，即使在淡季，2010年的出口仍然呈增长态势，但是没有恢复到2008年的水平。原材料方面，铜价一度下挫，然后再度强劲回升，铝价保持平稳增长。人民币在第三季度强劲升值。市场进入淡季，压缩机、物流资源相对充裕。以下是详细报告。

二、整体走势

第三季度出口量为8，565，311台，与第二季度对比大幅下滑79%。



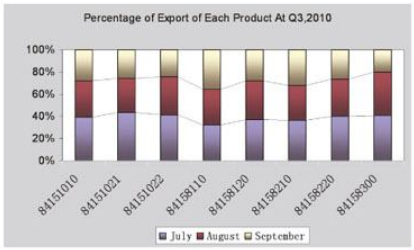
从下图看出，亚洲对空调需求量最大，其次为拉丁美洲。非洲多国天气炎热，常年对空调需求量大，即使在淡季，需求量相对平稳。

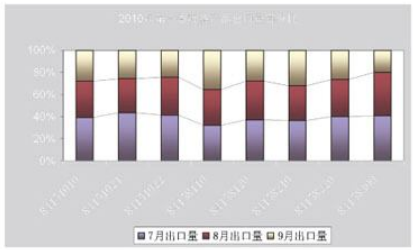


在第二季度，对北美洲出口量大幅增长，主要是美国天气炎热，对空调需求量大，其次由于库存消化完毕，采购商开始大量进货。在第三季度，北美洲出口明显下滑，其中大部分需求被美国消化。虽然债务危机的阴影仍然笼罩在欧洲上空，但是欧洲的回暖将会是2010冷年最大亮点。得益于高温天气，俄罗斯、意大利、法国、土耳其等国家的空调均大热。亚洲各国对空调需求普遍稳定，即使进入淡季，中国出口到亚洲各国的空调数目仍然比其他州较为庞大。巴西、阿根廷、墨西哥等新兴国家都落在拉丁美洲，7~9月份又是拉丁美洲对空调需求剧增的月份，出口量大增不足为奇。大洋洲

and New Zealand, whose demand on AC is not big. Therefore even though at season, its export increased is limited compare with other continent. Africa has huge need on AC but its economy limited the development of AC .

只有澳大利亚和新西兰两个国家，因此即使进入旺季，需求量总体不高。非洲保持平稳的需求。虽然天气炎热，但是经济发展不均衡，将长期影响空调在该洲的发展。





We could see from above diagram, demand on all product keeps balance expect air conditioner with cool and heat revised valve whose cooling capacity ≤4000 kilocalorie .

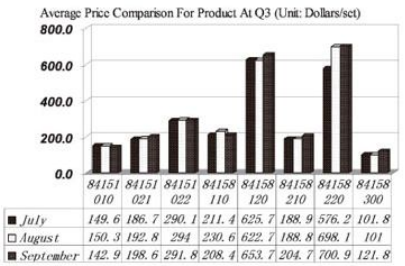
从上图看出，除了制冷量≤4000大卡/时的装冷热换向阀空调器，在9月份需求量有较大的增长，大部分产品需求平衡。

Remarks: 84151010 etc. no. is customs code, and each code represent one kind of product, please see the below detail:

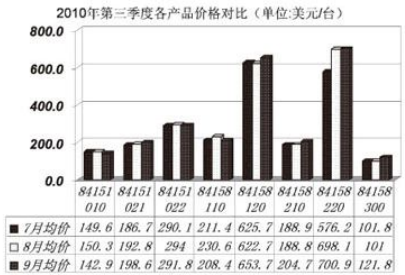
备注：84151010等数字为海关代码，每个海关代码代表一种类型产品，请看下表：

Product category	Customs Code
Isolated Type Window or Wall Mounted Air Conditioner	84151010
Split Type Window or Wall Mounted Air Conditioner with Cooling Capacity ≤ 4000 Kilocalorie	84151021
Split Type Window or Wall Mounted Air Conditioner with Cooling Capacity >4000 Kilocalorie	84151022
Air Conditioner With Cool and Heat Revised Valve, Cooling Capacity ≤ 4000 Kilocalorie	84158110
Air Conditioner with Cool and Heat Revised Valve, Cooling Capacity >4000 Kilocalorie	84158120
Other Air Conditioner with Cooling Capacity≤4000 Kilocalorie	84158210
Other Air Conditioner with Capacity >4000 Kilocalorie	84158220
Air Conditioner Without Cooling Device	84158300

产品类别说明	海关代码
独立窗式或壁式空气调节器	84151010
制冷≤4000大卡/时分体窗式或壁式空调	84151021
制冷＞4000大卡/时分体窗式或壁式空调	84151022
装冷热换向阀空调器，制冷量≤4000大卡/时	84158110
装冷热换向阀空调器，制冷量＞4000大卡/时	84158120
其他空气调节器，制冷量≤4000大卡/时	84158210
其他空气调节器，制冷量＞4000大卡/时	84158220
未装有制冷装置的空气调节器	84158300



	84151010	84151021	84151022	84158110	84158120	84158210	84158220	84158300
July	149.6	186.7	290.1	211.4	625.7	188.9	576.2	101.8
August	150.3	192.8	294	230.6	622.7	188.8	698.1	101
September	142.9	198.6	291.8	208.4	653.7	204.7	700.9	121.8



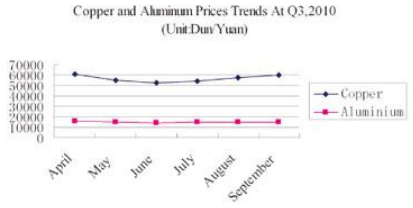
	84151010	84151021	84151022	84158110	84158120	84158210	84158220	84158300
7月均价	149.6	186.7	290.1	211.4	625.7	188.9	576.2	101.8
8月均价	150.3	192.8	294	230.6	622.7	188.8	698.1	101
9月均价	142.9	198.6	291.8	208.4	653.7	204.7	700.9	121.8

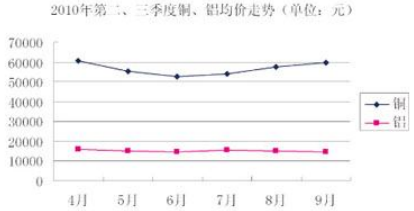
Above is the average price for each product at third quarter. We could know from above picture most kind of price maintain slightly increase trend except other air conditioner with capacity >4000 kilocalorie, whose price has a greatly rising at Autumn and September.

上图为各产品类型在第三季度的行业均价情况。从上图可知，制冷量＞4000大卡/时的其他空气调节器在8、9月份有较大的提价幅度，绝大部分产品保持平稳中微升状态。

Third. Prices Trend of Raw Material

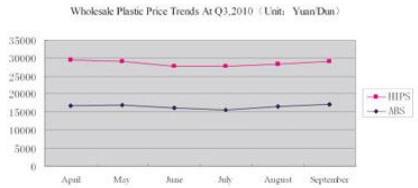
三、原材料价格走势





From the above diagram we can see that copper price used to slightly drop at June, then rising quickly. At September it back to 60 thousand dun/yuan. Aluminum is relatively stable.

从上图可见，铜价在6月一度下挫，然后马上恢复上升，到9月重回6万元/吨价位。铝价相对平稳。

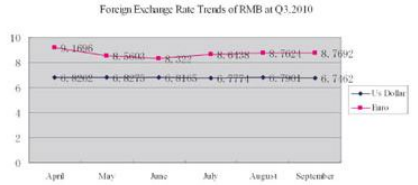


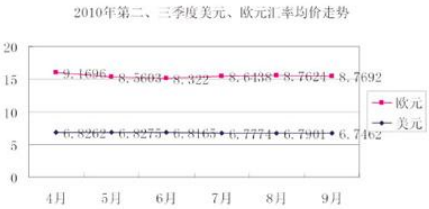
The supply and price of plastic raw material keeps slightly increased.

大宗塑料原料供应量和价格在第三季度均保持微幅上升趋势。

Four. Foreign Exchange Rate Trend

四、人民币汇率走势





The appreciation of RMB becomes a hot issue at third quarter. Many experts expected that RMB will keep steadily rising at 2011 year. The pressure of growth and profit become the main challenge for each manufacturer.

人民币对美元的升值成在第三季度成为一个热点问题。业内多名专家认为在2011年，人民币也将保持稳健中升值的情况。转型和提价压力正考验各大空调厂家。

Five. Vision of the AC market

五、市场展望

Generally speaking, at third quarter, export to Latin America and Oceania increased. Quarter 4 will be the beginning of 2011 cold year. For global economy is warming up, we expected next year still will be a good year.

总的来说，在第三季度，北半球进入淡季，南半球进入旺季，拉丁美洲、大洋洲对空调需求大增。进入第四季度，2011年冷年旺季即将启动。由于全球经济复苏情景乐观，预料明年冷年开局可以延续2010年的好境况。

Iran Ban Import Non-Energy Saving Air Conditioners

伊朗禁止进口非节能型空调机

From the National Business Department website's news, Iran assembly is discussing a law of banning import non-save energy air conditioners, and this law will be passing in the near future.

据中国商务部网站得知，伊朗议会正在讨论禁止进口各类非节能型空调的法案。预计该法案将于近期获得议会通过。

New Functions of AC: Discharge Searing Heat Can Be Recycling

空调功能又有新突破排放热气回收可利用

From the report of China Consumer News, reporter knew that at China Service Expo., a multifunctional air conditioner water heater has attracted people's attention. When the air conditioner is switch on status, it can be offer 55–75℃ hot water. We know from the staffs, the compressor of air conditioner can recycle its hot-gas, and then apply in heating the water, and truly achieved for multifunctional, integrated the function of high efficiency, environmental protection, and saving-energy.

据《中国消费报》报道，在近日举行的中国国际服务贸易博览会上，一款多功能空调热水器引起了人们的关注。该空调只要处于使用状态，就可以给人们提供55—75℃的热水。据工作人员介绍，他们把空调压缩机排放的热气进行了回收，对水进行加热，从而真正达到了一机多用、高效、环保、节能。

Latin America AC Market Being Global Emerging Potential Market

拉美地区空调需求增速显著 成全球新兴潜力市场

From the Industry Online report, there are 75% areas are in the tropical zone, temperature is obviously high, especially in 2010 year, when northern hemisphere temperature was highly, the temperature in Latin America was obvious high, therefore, the citizen need air conditioners has relatively quickly increase. According to Industry Online statistic, from past eight months, there were more than 600 thousands air conditioners exports to Latin America. Compare with last year of same period, it is a double increasing. Brazil, Argentina, Uruguay, Paraguay, etc countries has increase exponentially. From the global marketing, we can see that, Latin America is the new potential market; there are many air conditioners companies compete in this region.

Booming Economy Promoted AC Consumption

In 2010, Latin America economic grew quickly. Latin America economic increase at a 5.5% per year from 2003 to 2008, inflation rate remained at the mean of unit's digit. Financial Crisis has not embarrassed economic grow up. It is expected that the growth of LA economic will be over 5% per year again in 2010. Booming economic truly adapting to development of society. From the World Bank Report, in 2015, southeast, Latin America and south Asia and even Africa will be the "new rich countries", Latin America middle class population has been continued to grow as well as the whole purchasing power will be continued to grow. Air conditioning, along with World Up 2014 and Olympic Games 2016 are coming, the eyes of the world will be on Latin America.

Split AC was the most popular products in Latin America, the split AC market quantity were 424 thousands sets, increased by 7.3% over the previous year, 51.7% in total marketing ratio. Window AC has been certain increasing in Latin America, market quantity was 391 thousands sets, increased by 4.5% over the previous year, 47.7% in total marketing ratio. Although window AC marketing in LA is not small, compare with the ratio of split AC, the ratio of window AC quantity is reducing. It is forecasted that the AC in Latin America should be continues increase in 2011, there are total 846 thousands sets at that time, the ratio of window AC quantity should reduce; the split type of market demand should speed up

Generally speaking, each class of AC product has its specific market in Latin America. For more and more AC manufacture enter Latin America as well as the mature of technique, we could predict that the low-cost market will gradually reduce.

据产业在线报道，拉丁美洲四分之三的面积都位于热带范围，气温明显偏高，尤其是2010年，当北半球限于高温炙烤之时，拉美地区气温也明显偏高，居民对空调的需求出现了较快的增长。根据产业在线数据统计，2010年前8个月，中国空调出口拉美地区已经超过600万台，同比翻倍增长。其中巴西、阿根廷、乌拉圭、巴拉圭等国都出现了爆发式的增长。从全球空调市场来看，拉美地区已经成为的新兴的潜力市场，目前多家空调企业竞逐拉美市场，力图抢占先机。

经济的快速发展 推动空调消费需求的增长

2010 冷年拉美国家经历着非比寻常的发展。从2003到08 年的五年内，拉美地区经济的年均增长率为5.5%，通胀率保持在个位数水平。金融危机的短暂影响并没有阻碍经济的增长。预计，2010 年拉美地区的经济增长率将再次超过5%。经济增长是与社会发展同步的。数千万拉美人摆脱了贫困，加入了日益壮大的下层中产阶级队伍。根据世界银行的报告说，到2015年，东南亚、拉丁美洲和南亚国家，甚至非洲都有可能成为"新的发达国家"，拉美地区的中产阶级人口将继续增加，因此拉美地区的整体购买力将继续提高。空调市场规模也将随之扩大，随着巴西２０１４年世界杯和２０１６年奥运会的临近，拉美地区将成为世界的焦点。

拉美地区分体机继续保持对窗机的领先地位，分体机市场容量为424 万台，同比增长了7.3%，占市场总量的51.7%。窗机在拉美市场也有一定的增长，10 冷年窗机市场容量为391 万台，同比增长了4.5%，占市场总量的47.7%。窗机在拉美还是有不小的市场，但是相比分体机的增长来看，窗机所占的市场容量还是在缩小。预计2011 冷年拉美市场容量还会维持增长，总量将达到846 万台，窗机市场容量占比会进一步缩小，分体机的市场增长速度有所加快。

另外，总体来看，拉美国家高中低端产品都有相应的市场，廉价低端的市场也有相当的规模，但是随着此地经济的发展，参与竞争企业的增多，空调技术的不断成熟，不难预见，这部分市场将逐渐缩小。

CHIGO Have a Harvest at 108th Canton Fair
志高空调广交会斩获颇丰

The first term of 108th Canton Fair closed at Guangzhou, October 19th. Many exhibitors gain a good harvest for global economy warming up. It is known that the total turnover is 21.15 billion dollars, increase 12.3% compare with 107th Canton Fair. At home appliance industry, CHIGO had a good harvest for its outstanding energy-saving products.

The World's Highest EER Product Win Favor

From the first half year of 2010 until now, the economy of Europe gradually warm up. That's why Europe clients who visited 108th Canton Fair obviously increased. Clients from South America, North Africa, India are less than Europe clients. Beneficial for 2010 year economy recovery and the green policy promote energy-saving products, most clients show their confidence on next year's sale.

According to the introduction of representative of CHIGO export division, compared with before Canton Fair, all demonstrate products show the concept of green and energy-saving while its technique is much more mature than before. Especially two types of world's highest EER products, Inverter King and Low Carbon King who is fixed frequency, win much favor for both of them break the energy-saving record. They attracted a lot of clients to negotiate and obviously promoted sale. "We show a series of low carbon product and demonstrate our strength and technique breakthrough, so that clients trust us more and willing to cooperate with us" the representative told reporter.

Mr. Micky is a client from UAE whose company already cooperated with CHIGO more than 5 years. He expected next year will increase 30% ~ 40% orders volume to CHIGO. In his opinion, the term of low economy already went and never back, the booming of real estate in UAE will promote the development of AC industry. "Among so many AC manufacturers, the low carbon products of CHIGO meet green policy of UAE as well as our company's strategy. We would strengthen the cooperation with CHIGO as we are confidence with CHIGO's products and technology strength." Mr. Mickey said.

Innovation System to Face Challenge

Even though the turnover of 108th Canton Fair has a good increase, the whole performance still not back to the period before financial crisis. As for home appliance industry, the whole manufacturer is facing multi-challenge such as raw material price rising, RMB appreciation, trade barriers increase, profit decreasing etc. On the fair, many people who are working at home appliance industry told reporter that most clients wiling to accept price rising. But as for the rate of rising, each client has different feeling and opinion. Manufacturers still need to fight for clients' acceptance and recognition. How to summarize the lesson learn from Canton Fair and how to handle future challenge become the common difficulty for every home appliance manufacturer. CHIGO try to set up flexible innovation structure to win client's understanding and support. "We will focus at the following three aspects to overcome difficulty. Firstly, we will develop new product to lead market demand. After company going to stock list, we gain greater support at researching, for example, we develop Inverter King whose EER high to 8.36. Secondly, we would develop partnership with clients to set up price system together. Through singing strategy partner agreement, we would share cost with clients for we enjoy the same benefit. Thirdly, we would improve marketing and service to provide more valuable service to clients. CHIGO will have a series of innovation at 2011 year, such as held dealer meeting to inspire client to promote CHIGO brand and product." the representative told reporter at last.

10月19日，第108届广交会第一期在广州圆满落幕。在全球外贸形势逐渐回暖的情况下，各参展商收成普遍得到好转，据统计，第一期总成交211.5亿美元，比第107届增长12.3%。在众多参展的家电企业中，主打节能环保产品的志高空调表现抢眼，斩获数量可观的意向订单。

全球最高能效产品受追捧

2010年上半年至今，欧洲经济逐步恢复增长，带动到访广交会的欧洲客户明显增多，其次是南美洲、北非、印度等新兴市场的客商。受惠于2010年全球经济复苏、各国低碳经济政策出炉等有利因素，到访的空调界客户对来年空调销售信心普遍高涨。

据志高海外事业本部相关负责人介绍，本届广交会上，志高参展产品与上届相比全部升级，所有产品都体现了绿色低碳的理念，科技含量较上届也普遍得到提升。尤其是主打的两款世界第一高能效空调，变频的"变频至尊"与定频的"低碳王"双双打破世界能效比记录，成为志高展台的亮点，吸引了不少客商的驻足洽谈，对订单的刺激作用明显。"我们展出了成系列的低碳产品，让客户看到了我们在绿色节能产品上所取得的技术突破和已有优势，这也让客户更加信赖我们，愿意与我们合作。"该负责人表示。

Mr. Micky是一位来自阿联酋的志高客户，他所在的公司于志高的合作已经长达5年。这次到访广交会，他表示公司与志高的合作关系会更进一步，预料2011年双方的合作量会增长30~40%。他表示，经济低迷期已经一去不复返了，随着经济形势回暖，阿联酋房地产行业重新蓬勃，空调业将迎来新的发展机会。"在众多的中国空调企业中，志高所主打的低碳节能产品符合阿联酋的国家政策导向，也与公司的发展战略相契合。我们看中的是志高的低碳产品与科技实力，因此我们将加强与志高的合作。"

创新机制应对挑战

尽管本届广交会成交量较上届有所增长，但整体仍未恢复至金融危机前水平。就家电行业而言，目前行业整体仍然面临原材料价格上涨、人民币升值、贸易壁垒增多等众多不良因素的困扰，行业企业面临利润空间不断压缩的困境。在展会现场，接受采访的家电行业人士普遍表示，到访客户对提价早已有所准备，也认同提价。但是对于提价的幅度，每个客户接受程度不一，参展商仍然需要积极争取客户的认同和接受。如何总结广交会经验教训，应对未来不利挑战，成为各家电企业面对的难题。

对此，志高将主要通过建立灵活的创新机制，来赢得客户的理解和支持。"我们将着重从三个方面发力来迎接挑战。首先是积极开发新产品，引导市场需求。公司上市后，我们在技术研发方面得到了更大的支持力度，能效比8.36的变频至尊的研发推出就是例证。其次我们会与客户结成深层次的伙伴关系，共同制定价格体系。通过签订战略合作伙伴协议，形成利益共同体来一道分担成本。第三，我们将创新营销及服务模式，以提供高附加值的服务。2011年志高会有一系列新动作，例如我们将通过举行大型经销商会议来激励客户推广我司品牌。"志高海外事业本部相关负责人表示。

CHIGO's New Wall Split Type AC Cooling Capacity Broke World Record 志高新品挂壁式空调制冷量破世界纪录

"In the field of big cooling capacity wall split type air conditioner, the maximum cooling capacity only can be 10000W." Now this situation has been changed by domestic AC enterprise. Recently, the reporter learned from CHIGO that they successfully developed a new wall split type air conditioner, its cooling capacity can reach 12000W, it broke the current world record.

It is reported that in the large space such as living room or other public places, the floor standing type air conditioner is the only large and efficient air conditioner among residential air conditioners, its cooling capacity can meet people's request but its indoor units is placed on the ground, occupy a large area, greatly reduce the effective utilization of space. Also its fixed height and narrow outlet limit the wind angle. And a traditional wall split air conditioner's cooling and heating effect is difficult to achieve ideal state due to large space. Hence, this became a difficult problem which trouble consumer to chose.

To solve this problem, CHIGO has started to develop super-high cooling capacity wall split air conditioner from 2009 now the project has been successfully completed, the product will be officially achieve mass market.

According to CHIGO's head of technology department , we have employed many most advanced technologies in the world for this product, such as multi-fold evaporator, Eight-in and Eight-out evaporator, it makes this product can beyond domestic supplier of air conditioner in many technology aspects .this super-high cooling capacity product can not only saves space but also reaches cooling capacity 12000W, the maximum amount in current wall split air conditioner field, effectively save the problem of poor cooling capacity of wall split air conditioner in large place. Otherwise, this product not only surpass ancient wall split air conditioner in cooling capacity, but also save electricity cost by 30% at least, comparing with same power consumption floor standing air conditioner.

Before this product came out, CHIGO developed fixed frequency model and Inverter model with high energy class, whose EER is 5.0 and 8.36 respectively and renewed the world record on five occasions. The AC field launched the super-efficient cooling capacity successfully, filled in the gap of global air conditioner market, which show leading position of CHIGO in high-efficient and energy saving field.

"在大制冷量的挂壁式空调领域，最高制冷量只能做到10000W。"如今，这一现状被国内空调企业所改写。近日，记者从志高获悉，志高空调成功研发出的新品壁挂式空调，其最高制冷量达到了12000W，打破了一项新的世界纪录。

据了解，在大空间比如客厅或其他公共场所，目前市场上大型高效的家用空调器只有分体柜式空调，虽然制冷量能满足需求，但分体柜式空调的室内机是放置于地面，占地面积大，大大降低空间的有效使用率，同时柜式内机的高度固定，其摆风角度因高度限制和风口窄而受到局限。而安装一台传统的壁挂式空调，则因建筑空间太大，制冷、制热效果又难以达到理想状态。因此，这成了困扰许多消费者选择空调产品的一大难题。

为解决这一难题，志高空调从2009年开始研制超大制冷量的高效挂壁式空调，如今该项目已顺利完成，产品将正式实现批量上市。

据志高相关技术负责人介绍，该产品采用了目前业界领先的多项技术，通过采用多折多列、八进八出的最佳蒸发器分流方式等多种精细化创新设计，使最终成型产品多项技术指标超越国内同行标准。此款超高制冷量不仅有效节省了空调室内机的占用空间，而且最高制冷量可达12000W，是目前业内分体挂壁式空调产品所能达到的最大值，有效解决了大空间使用挂壁式空调制冷不够强劲的难题。此外，此款产品不仅制冷量实现了对以往挂壁式空调产品的超越，与同等功率的柜式空调相比耗电成本至少降低30%。

在此款空调面世之前，志高曾推出了能效比达5.0的定频空调与能效比8.36的变频空调，并先后五次刷新世界能效纪录。此次业内首款超大制冷量挂壁式空调的成功推出，填补了全球空调市场在这一领域的空白，是志高空调高效节能技术全球领先的又一重要见证。

The Third High Level Green Development China Forum Opening 第三届中国绿色发展高层论坛举行

CHIGO Award China Top Ten Green Responsibility Enterprise
志高获"中国十佳绿色责任企业"等两项殊荣

Recently, the third China green development high level forum organized by United Nations Environment Programme was hold in Kunming. The forum authorities announced the lists of China Top Ten Green Cities, China Top Ten Green Responsibility Enterprises etc.. After the deliberation of netizen and forum expert commission, CHIGO won the title of China Top Ten Green Responsibility Enterprise and Global Green AC Contribution Award. Besides, CHIGO becomes the only winner of "Award of Global Green low-carbon aircondtioning contribution" in the AC industry.

The forum of this year is themed with Green New Policy, Green Responsibility, and mainly organized by United Nations Environment Programme, United Nations Development Programme, FAO guide, China Desertification Control Foundation, China Association of Mayors, China Environmental Science Society and China Association of Poverty Alleviation and Development. Mr.Ban Ki-Moon ,UN Secretary-General also sent congratulation letter for this forum specially. Mr. Li jinhua , CPPCC Vice Chairman ,also attended this forum. That's why this forum have a big influence in China and abroad.

The list of China Top Ten Green Responsibility Enterprise announced by forum aims at citing the enterprises which carry out social responsibility actively and which made a great contribution to the environmental protection. The list is selected through four steps of strict sifting and control, which is self-recommendation or recommendation, preliminary evaluation of forum experts, net work referendum, and evaluation of expert jury. The click rate of this list evaluation in Sina Green Chanel and China Green News has reached more than 200 millions. The evaluation also gained the great support from United Nations Environment Programme, FAO, UNDP, etc. authoritative organization or experts. After 30 items review in 3 months, the final Top Ten enterprise were born.

Since the day of foundation, CHIGO group already consider making people's life better as its enterprise vision, and always carry out the social responsibility actively . At the aspect of environmental protection, CHIGO keeps leading level at energy saving technology in AC industry and aims at making the best AC in the world, and to provide better energy saving AC products to customer. The EER 8.36 Inverter DC and EER 5.0 Fix frequency AC broke the world efficiency records for 5 times and keep the NO.1 till now. CHIGO rewarded by Unite Nation with the title of Global Green Energy-saving Air-conditioning which is the only enterprise win this award in AC industry. At national energy-saving benefical people project, CHIGO responses immediately, and becomes the champion at first class efficiency product. Through the promotion of two national energy saving policy

日前，由联合国环境规划署等机构参与的第三届中国绿色发展高层论坛在昆明举行，论坛权威发布了中国十佳绿色城市、中国十佳绿色责任企业等榜单。经过网民评选、论坛专家委员会评审审议，志高空调从众多企业中脱颖而出，获得"中国十佳绿色责任企业"称号，此外，志高还成为"全球绿色低碳空调贡献奖"的空调行业唯一获奖者。

本届中国绿色发展高层论坛以"绿色新政、绿色责任"为主题，由联合国环境规划署、联合国开发计划署、联合国粮农组织指导，中国治理荒漠化基金会、中国市长协会、中国环境科学学会、中国扶贫开发协会联合主办。联合国秘书长潘基文专门为本次论坛发来贺电，全国政协副主席李金华参会，论坛在国内外形成较大影响力。

由论坛发布的"中国十佳绿色责任企业"榜单，旨在表彰积极践行企业社会责任、为地球环保低碳事业做出突出贡献的杰出企业代表。评选经由自荐或推荐、论坛专家委员会预审、网络公投、专家评委会评审4个环节的严格筛选和层层把关，在新浪网环保频道和中国绿色新闻网网上点击率超过2亿多人次。评选还得到了联合国环境规划署、粮农组织、开发计划署、国内相关部委领导、数十位国内外院士、专家学者的鼎力支持。综合考察了30项评价指标，经过3个月的激烈角逐最终产生十强榜单。

志高空调自成立以来，将"让人类生活得更美好"作为企业愿景，始终积极企业个体责任和社会公共责任。在绿色环保方面，志高在空调节能技术领域领先业界，致力于"造世界上最好的空调"，为全球用户提供更加高效节能的空调产品。公司能效比8.36变频空调、能效比5.0定频等产品五次打破空调能效世界纪录并保持至今，曾获得联合国颁发的唯一"全球绿色节能环保空调"大奖。在国家节能惠民工程中，志高率先响应支持，累计一级能效中标总数和中标产品能效比均夺行业之冠，并通过"节能惠民，一年包换"、"节能惠民，企业担责"极大地推动了高效节能产品的快速普及，"节能空调选志高"已成为行业和消费者共识。

"Buy energy-saving AC，choose CHIGO" has become a common consensus in the mind of consumers.. At the same time, CHIGO always walks at the first line for promoting low carbon economy developing. The establishments of 5000 low carbon life houses and the implement of "Five One project" in commercial AC are good examples.
China Top Ten Green Responsibility Enterprise and Global Green AC Contribution Award, are two honors about the entreprise's social responsibility for CHIGO after getting the "Environment Contribution Award" awarded by China Household Electrical Association. Mr.Li Xinghao, president of CHIGO group, has been to Kunming to accept the award and to attend the featured conversation of "Energy saving, Green Responsibility".
It is known that CCTV reported this forum opening news.

同时，志高在推动行业低碳发展也一直走在前列，5000家低碳生活馆的开设以及中央空调实施低碳"五个一"工程均是很好的明证。
此次荣获"中国十佳绿色责任企业"与"全球绿色低碳空调贡献奖"是志高继中国家用电器协会颁发的"环境贡献奖"等奖项之后再次获得企业社会责任方面的殊荣。公司董事长李兴浩代表公司前往昆明领奖并参与"节能减排 绿色责任"的专题对话。
据悉，中央电视台新闻联播对此次中国绿色发展高层论坛进行了新闻报道。

Chigo Launching the World's First Residential Antimicrobial Copper AC With Cu+ Mark

志高推出全球首台CU+铜抑菌家用空调

On Nov. 20th, CHIGO together with the International Copper Association held a joint press conference in Beijing, announcing that CHIGO launched the world's first Direct Inverter CU+ antimicrobial residential air conditioning. Thousands of mainstream medias and journalists from China, USA, UK, Middle East, Japan and Singapore witnessed this historical time. Mr. Li Xinghao, the president of CHIGO, and Mr. Xu yongxin, the vice president of Global Technological Research and Development of International Copper Association, and Mr. Xu hong, the president of Asia Area of international Copper Association attended the press conference.
The attending experts thought that the launch of Antimicrobial Copper AC with Cu+ Mark is a revolutionary breakthrough at the aspect of health and energy-saving technology, which also demonstrated CHIGO's leading competence at AC industry. At the same time, this product is integrated with all the leading technique of residential AC, which also delivers a message that CHIGO is going to dominate the high-end AC market.

Global First Residential Antimicrobial Copper AC with Cu+ Mark

On September 3, 2010, CHIGO with the International Copper Association signed a strategic cooperation framework agreement; two parties formally start cooperation in the field of industry-combination, energy conservation, green and healthy areas. The priority is given to this project: the application of antimicrobial copper technology at household AC. Beneficial for both sufficient technical reserves and strong R & D capability, the first global household antimicrobial copper AC with Cu+ mark launched in less than 4 mouths. CHIGO is firstly approved to obtain the using right of the contacting-surface antimicrobial material mark "CU+" by EPA around the world and becomes the world's first household appliance enterprise to use such mark.
At press conference, the top leaders of CHIGO and International Copper Association unveiled the mistrial yashmark of global first household antimicrobial copper AC with Cu+ mark. According to the introduction of Mr. Zheng zhuyi, the vice president of CHIGO, it is an updating product of Inverter DC Three Super King, which not only inherits the intelligent characteristic of super energy saving (EER up to 8.36 break world record), super silent (19 dB), super healthy (die of natural bacteria up to 91.36%), but also is the first global household antimicrobial copper AC with Cu+ mark.
Reporters, on the scene, saw that the fin of condenser and evaporator at antimicrobial copper AC with Cu+ mark were made by copper instead of aluminum.
"The natural antibacterial performance of copper already is approved by America Environmental Protection Bureau at 2008. Europe and America already apply this natural antibacterial technology at medical and large-scale public construction. The copper fin used on household AC is a leading application for this technology." Mr. Zheng Yongxin, the vice president of Global Technological Research and Development of International Copper Association said. According to the report of U.S. Environmental Protection Agency, copper could kill 99.9% germ attaching to the surface at moderate temperature. In reference to the testing report of Environmental Health and Related Product Safety office, Chinese Center for Disease Control and Prevention , the average inhibition rate of copper to staphylococcus aureus is 99.95%, to Bacillus coli is 100%, to candida albicans is 99.96%. After the long term research of Institute of Refrigeration and Cryogenics at Shanghai Jiao Tong University, the heat exchange performance of copper fin has much more efficiency, which could save 20% power if it has been used for 1 or 2 year as well as it is more durable. Compared with the common fin corroded to mildew by condensed water, the copper fin is much more stable and could keep long term clean at surface to inhibit bacterial growth. So that consumers do not need to worry about air conditioner being a hotbed of harboring and breeding bacteria.

本报讯　11月20日，志高空调与国际铜业协会在北京联合举行新闻发布会，宣布推出全球首台"CU+铜抑菌变频至尊三超王"空调，来自中国、美国、英国、中东、日本、新加坡等海内外主流媒体、上千名志高经销商共同见证了这一历史时刻，志高空调董事长李兴浩、国际铜业协会全球技术研发副总裁郑永新及亚洲区总裁徐弘等悉数出席。
与会专家认为，"CU+铜抑菌变频至尊三超王"空调的问世，是空调健康、节能技术的革命性突破，再次彰显了志高领跑行业的技术实力，同时，由于该产品融合了全球家用空调几乎所有的领先技术，也传递了志高强势突围高端空调市场的信号。

全球首台"CU+铜抑菌"家用空调亮相

今年9月3日，志高空调与国际铜业协会签署战略合作框架协议，双方正式在产业联合、节能减排、绿色健康等方面展开合作，而最先启动的项目则是"铜抑菌技术"在家用空调领域的应用。借助于双方充足的技术储备及强大的研发能力，在携手不到四个月的时间内，全球首台拥有"CU+铜抑菌"技术的家用空调就得以与世人见面。志高由此获得全球首个获美国EPA认可的接触表面抑菌材料标志"CU+"的使用权，也成为全球第一个应用该标志的家电企业。

Three Super King with copper anti-bacteria is Tailor Made for Elite

At 2007, the "Copper and Aluminum Dispute" about the connection pipe of is widespread concerned. Which performance is better is always an endless debate in AC industry. The most important key point for aluminum replacing copper at that time is due to cost savings and copper resource scarcity.
CHIGO hand in hand with International Copper Association using copper to replace aluminum at antimicrobial copper AC with Cu+ mark, definitely gained a lot of attention and argument. For that, Mr. Zheng Zhuyi said: "the antimicrobial of copper will raise the cost of AC, but its promotion and application will bring great benefit to people. CHIGO will apply this technology to DC Three Supre King; it will be perfect integration of the original smoke filtration and air-purification technology from the materials to machine, and from indoor unit to outdoor units. It can fully meet the high-end consumer groups, social elites and public health facilities' real high-end health of demand for air conditioning.

在当天的新闻发布会上，志高空调与国际铜业协会双方高层一同揭开了"全球首台CU+铜抑菌家用空调"的神秘面纱。据志高常务副总裁郑祖义介绍，这属于"变频至尊三超王"的升级版，它不仅传承了超节能（季节能效比8.36破世界纪录）、超静音（19分贝超低极限静音）、超健康（对空气中自然菌消亡率达到91.36%）的智能复合特点，而且是全球首台拥有CU+铜抑菌技术的家用空调。
记者在现场看到，此款"CU+铜抑菌"三超王空调，其冷凝器与蒸发器的翅片由传统的铝改成了全铜。
"铜金属天然抑菌能力已在2008年获得美国环境保护署认证，欧美近几年已在医疗体系与大型公共建设中对其灭菌性能进行应用；而铜翅片家用空调是对这一金属天然抑菌性能在电器领域中领先全球的应用。"国际铜业协会全球技术研发副总裁郑永新表示。
据美国国家环境保护局检测报告显示，铜金属在室温下可以杀灭其表面附着的99.9%的细菌。中国疾病预防控制中心环境与健康相关产品安全所检测报告表明，该产品铜蒸发器材料表面对金黄色葡萄球菌作用24小时的平均抑菌率为99.95%，对大肠杆菌的平均抑菌率为100%，对白色念珠抑菌率为99.96%。而上海交通大学制冷与低温工程研究所通过长期研究试验还发现，铜翅片换热器因其优异的导热性能起到长效节能效果，使用1至2年可节电20%，并且使用寿命也相应增长。同时，相较于现在的空调翅片很快被冷凝水腐蚀发霉的现象，铜翅片有着较稳定的运行表现，可长期保持表面清洁，抑制细菌繁殖，这样，消费者再也不用担心家中的空调器成为窝藏和繁殖病菌的温床。

"铜抑菌"三超王为精英量身定做

早在2007年，有关空调连接管的"铜铝之争"曾在业界和消费市场引起广泛关注。业内围绕"铜管好，还是铝管好"争论不息，而当时引发铝代铜最关键的原因是节约成本及铜资源的紧张。
志高此番携手国际铜业协会在全球范围内首推空调翅片"铜代铝"，自然再度引发业界关于这一问题的争论。对此，郑祖义表示，我们看重的是"铜的抑菌性"，虽然空调整机成本有所增加，但它的推广及应用将对人类的健康事业带来极大好处，而且我们将这一技术应用到了"变频至尊三超王"空调当中，铜翅片的抑菌性与原有烟滤清技术完美融合，从材料到整机、从机内到室内的空气得以全方位净化，能充分满足高端消费群体、社会精英及公共卫生场所对真正高端健康空调的需求。
事实上，郑祖义这一判断不无根据，据万维家电网针对当下空调清风健康状况进行的消费者在线调查显示：近7成的消费者担忧空调内部的清洁状况，期待在一般的空调保洁方案外，能开发出更有效的抑菌空调选择，67%消费者能接受价格较高的创新抑菌空调产品。
据志高技术部相关负责人透露，用铜翅片代替铝翅片，一台1匹的壁挂机，用铜量将增加约6公斤，包括材料及其它开发成本将增加1000元左右。
业内人士认为，相比铝翅片空调，该产品终端价格有较大幅度的增加，普通消费者可能接受较为困难，志高将其定位"为全球精英量身定做"，将有效填补现有健康杀菌领域高端市场的空白。

In fact, Mr. Zheng Zhuyi's judgment is not groundless, according to consumers online survey on Current health status of air-conditioning's breezing performance conducted by World Wide Web home network, more than 70% of consumers worry about the inner cleanliness of AC, and they hope AC manufacturers could develop antimicrobial AC besides the present's AC cleaning solution. 67% of consumers will accept higher prices of air conditioning products with innovative antibacterial performance.

According to the relevant person of CHIGO's Engineer Department revealing, If the copper fin replacing aluminium fin, the amount of copper will increase by about 6 kilograms for 1P split type. and materials and other development costs will increase by 1,000 yuan

The industry insiders think, compared to aluminum fin for air-conditioning, the terminal price of this products have a more substantial increase by large scale. Ordinary consumers may be more difficult to accept. CHIGO defining it as Tailor Made for Elite will. effectively fill the blank high-end healthy AC market.

CHIGO delivering the message to Make a Breakthrough at High-end Market

In recent years, CHIGO keeps steady development and market share always hovers at third or fourth place. Basic marketing strategy to win market initiative is high performance-price ratio. Along with CHIGO listing in stock market, its brand reputation keeps rising. Especially recent years, it breaks world record at energy saving and technology field, the siuation for CHIGO breaking through in high-end market is already mature.

In order to make consumers more confident to buy this high-end and epoch-making air-conditioning, CHIGO made a serious commitment at press conference: from 1st Jan. to 31st Dec. in 2011, if consumer finds that there is any other AC whose performance gained the certification of National Test Authority and was better than CHIGO's antimicrobial copper AC. CHIGO will withdraw product unconditionally. At the same time, CHIGO will give a full refund and make compensation as 10% interest rate of all funds.

Experts analyze that association with CHIGO launching the "world first" technology one after another, such as the "Double energy" and "Three Core Intelligent DC Three Super King", "8.36 DC Extreme" in recent years. This action is the release of a further signal to AC industry: changing the offensive strategy to seize the market by high performance-price ratio and gradually beginning to fight and dominate the high-end market in order to break the existing industrial structure. This time, CHIGO together with International Copper Association launch this updated Three Super King. On one hand, it is the precedent for domestic air-conditioning enterprise to make cooperation with International Copper Association and suggesting that this kinds of copper fin's technical authority. On the other hand, it indeed enhances a new high degree for the healthy functioning of the domestic household air-conditioning, and is a sharp for CHIGO entering high-end market.

Becoming one of the leading brands in the AC industry, Whether CHIGO could transfer its advanced technology to high-end market, and whether antimicrobial copper AC could help CHIGO make a breakthrough at high-end market? All are worth to wait!

志高传递突围高端市场信号

近年来，志高一直保持了稳健发展，市场占有率徘徊于行业前三、四的位置，其营销策略基本采用以“高性价比”赢取主动权。而随着企业上市之后整体实力的不断增强，品牌美誉度的不断提升，尤其是近年来在节能技术领域不断打破世界纪录，志高空调在高端市场突破的时机已经成熟。

为了让消费者放心购买这一划时代的高端空调产品，在当天的发布会上，志高郑重承诺：“2011年1月1日至2011年12月31日（一年）期间，经国家级检测机构认可，在中国市场若有超过志高Cu+铜抑菌变频至尊三超王（KFR-25GWABP71+1A）综合技术指标的空调产品，志高接受无条件退机，全额退还购机款，并按10%的利率赔偿用户购机款利息。”

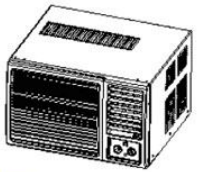
业内人士分析认为，联想到志高近年来接二连三地推出诸如“双节能”、“三核智能变频三超王”、“8.36变频至尊”等“全球首创”技术，此举其实是在进一步向业界释放一个信号，那就是要改变原以高性价比抢占市场为主导的进攻策略，开始逐步向高端市场重拳出击，以此为突破口改变行业现有格局。而这次与国际铜业协会携手推出这款升级版的三超王产品，一来开辟了国内空调企业与国际铜业协会合作的先例，暗示此款全铜翅片空调在技术上的权威性；二来也确实将国内家用空调健康功能提升了一个新高度，是为志高进军家用高端市场的利器。

业已成为行业领军品牌之一的志高能否将技术优势移植到高端市场，这款铜抑菌空调能否带领志高突围高端市场，值得期待。

Installation of Covering Window Type AC 上盖式窗机的安装

Written by Zhang Zhanwen, From Technology Center
文/技术中心 张展文

The current window AC of core N and P is covering type in our company. Installation of covering window type AC is different from drawing type, it is more convenient to install as it doesn't need to open the panel and outer casing, more convenient. Installation of the whole unit can be divided as followed steps.



1. Preparation

1) Check if the manual and installation accessories are complete.

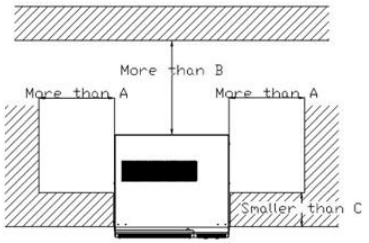
2) Connect the power and running equipment, check if the machine is operating normally.

2. Selecting the best install position

1) Select a place near electrical outlet.

2) Keep away from heat source, avoid direct sunlight.

3) Keep enough space between the equipment and obstacle.

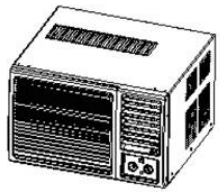


Ensure the minimum space of the equipment outside required according to cooling capacity.

Form 1, The minimum space required ,

尺寸 / 机型	2000W~2500W	3000W~3500W
A	400	400
B	500	500
C	170	190

目前我司的N内核及P内核窗机外壳采用上盖式，外壳上盖式窗机的安装不同于抽拉式，上盖式窗机的安装无需拆开面板和外壳，安装方便。整机的安装主要分为以下几个步骤：



一、安装准备

1）检查说明书以及安装附件是否齐全。

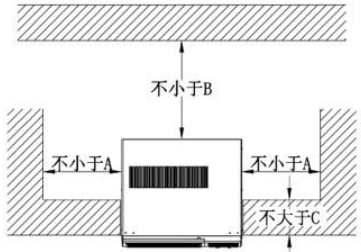
2）接通电源运行设备，检查整机是否运行正常。

二、选择最佳的安装位置

1）选择一个靠近电源插座的地方。

2）安装位置应避免靠近热源、尽量避开阳光直射。

3）安装位置应使设备与障碍物存在足够的空间。

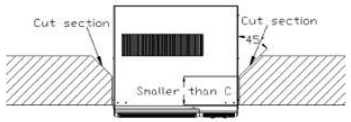


根据设备制冷量确定设备室外侧所需的最小空间。

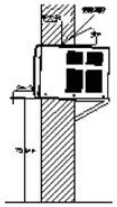
表一 设备室外侧应保留的最小空间。(mm)

尺寸 / 机型	2000W~2500W	3000W~3500W
A	400	400
B	500	500
C	170	190

4) Installation location should be solid enough to ensure equipment operate stably. Size of hole in the wall should match with size of machine.

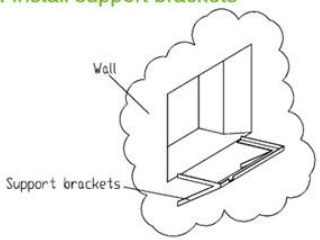


If wall is thick, it's necessary to expand the wall space on the equipment outer site, in order to make sure the top and side window is not obstructed, and the air circulate smoothly when the equipment running.



Select suitable installation height as per actual requirement. Make it slope backward by 2~3° with the horizontal direction,ensure indoor water drain smoothly and achieve good drawing water result.

3. Install support brackets

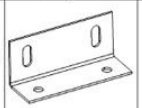


In order to make equipment installation secure and operate stable, it is necessary to install support brackets. Make the support brackets depended on the equipment, ensure the oblique angle suitable and avoid drainage component.

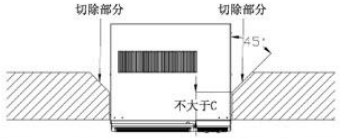
4. Fix equipment

If necessary, you can install upper guide in outer casing to limit the machine movement.

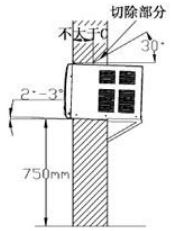
1) Check if the components are complete in accessory bag.

None	Installing Frame	Screw	Wooden screw
Appearance			
Quantity	2	4	4

4）安装位置应有足够的强度保证设备运行稳定。墙洞的尺寸应与机子尺寸匹配。



如果墙体较厚，在设备外侧面有必要将墙体扩大，确保设备顶面和侧面进风窗口不被遮蔽，从而使设备运行时空气循环流畅。



根据需要选择合适的安装高度。安装设备时使之与水平方向成2~3° 的向后倾斜，以便保证室内侧排水顺畅及产生更好的打水效果。

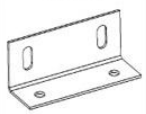
三、安装支撑支架

为了设备安装稳固、运行稳定，有必要安装固定支架。根据设备制作安装支架，确保倾斜角度及避开排水元件。

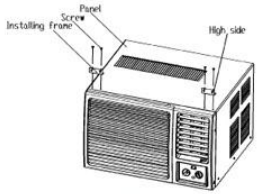
四、固定设备

如有必要可根据实际情况在外壳上安装挡板用于限制整机前后移动。

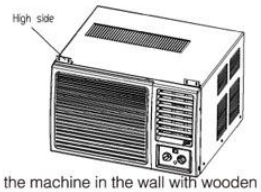
1）检查安装附件袋里的元件是否齐全。

名称	安装挡板	螺钉	木螺钉
外形			
数量	2	4	4

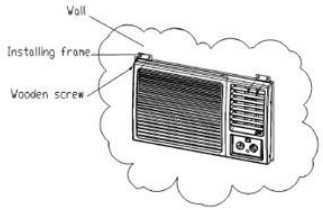
2) Fix the upper guide in outer casing with screws.



Install upper casing with the higher edge foremost and short edge confront the outside room.



3) Fix the machine in the wall with wooden screw.



4) Take sealing and waterproofing measures around the outer casing according to actual conditions.

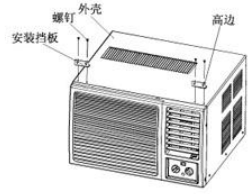
5. Select condensed water drainage pattern

This machine has two condensed water drainage patterns: The first one is to drain water through the leakage hole in the base, no need to install rubber plug. When the machine is running, it doesn't draw water, so noise is low but cooling effect is not very good. The other one is to drain water through the rear hole, it need to install the sealing ring and spout in the drainage hole, and block the chassis leakage hole with rubber plugs. It draw water when the machine is running, so noise is high but refrigerating effects perfect cooling effect.

1) Check if the components are complete in the accessory bag.

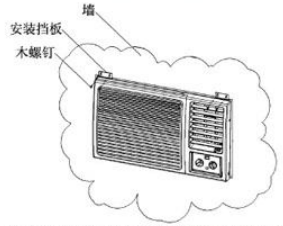
Name	Water outlet pipe	Sealing ring	Rubber stopper
Appearance			
Quantity	1	1	1

2）用螺钉将安装挡板固定在外壳上。



安装挡板高边朝上,短边朝向室外侧。

3）用木螺钉将整机固定在墙体上。



4）根据实际情况在外壳周围做好密封及防水措施。

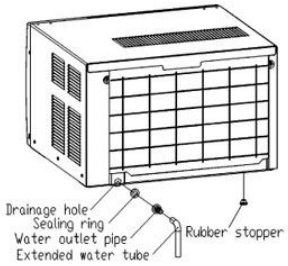
冷凝水排水方式的选择

本机存在两种冷凝水排水方式：一是通过底盘底面漏水孔排水，无需安装橡胶塞。这种排水方式窗机运行时不打水，噪音较低，但制冷效果较差。另外一种是通整机后侧排水孔排水，需在排水孔安装密封圈及出水嘴，并且将底盘漏水孔用橡胶塞堵住。这种排水方式窗机运行时打水，噪音较高，但能取得最佳的制冷效果。

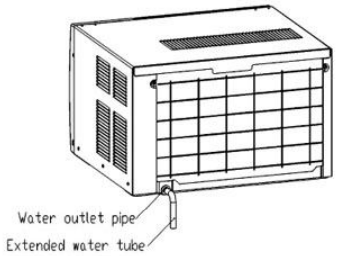
1）检查附件袋里的元件是否齐全。

名称	出水嘴	密封圈	橡胶塞
外形			
数量	1	1	1

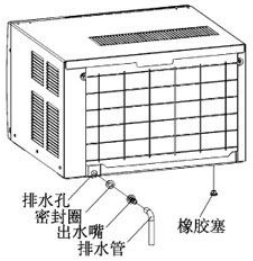
2) Select condensed water drainage pattern as required.



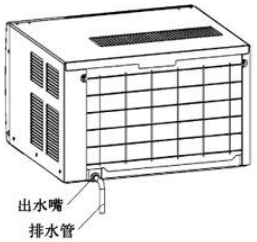
3) If select the second drain pattern, you can increase drainpipe as required.



2)根据需要选择冷凝水排水方式。



3)选用第二中排水方式时，可根据需要再另行增加排水管。



Excellent Quality, CHIGO Made

志高精细品质管理 打造精品品质

Interviewing the minister of Test Department of Quality Center, Mr. Zhao Guoyi
访品质中心成品检验部部长赵国义

Editor's Word: In September, 2010, CHIGO obtained the certificate for exemption from export inspection. Only two companies in air-conditioning industry received these special honors in split-type air conditioning sphere. Meanwhile, CHIGO took the lead and advocated implementation of "air-conditioning reliability standards," in the AC industry and also was the only AC company to achieve "free lifetime update for spare parts. The reason for CHIGO getting such an honor and having such a solid foundation for initiative implementation of the "reliability standards" in AC industry is that CHIGO always persisted in building the core competitiveness on the basis of exquisite quality.
After many years' hardworking, CHIGO commits itself to excellence in quality management, exploits her own path cautiously and conscientiously and wins consumer recognition finally. CHIGO Mirror's editor has an interview with Mr. Zhao Guoyi, the minister of Test Department of Center of Quality Management, showing you the common but glorious experience for the exploration of quality management.

Q1: I am very pleased to have the opportunity to interview Minister Zhao. Zhao is one of the founders of Center of Quality Management; his career development coincides with CHIGO's growth. At first, please talk about the history of Center of Quality Management.

Zhao: No problem, I joint in Chigo in 1996 and mainly was in charge of device management. At that time, Quality Control was still subordinate to the chief office of Technology Center. With the growth of our company and the gradual improvement of various systems, and in order to keep independence of the quality, Quality Management Center urgently needs a separate Quality Control Department to run the quality operation. In this way, Quality Center was established at the end of 2004. At the beginning, there were only three departments, namely, the Quality Department, Quality Testing

编者语： 2009年9月，志高获得国家授予“出口免验”证书，在空调行业仅两家企业能在分体空调上获得此项殊荣。同时，志高在行业倡导并率先执行“空调可靠性标准”，也是全球唯一一家做到“零配件终身免费更换”的企业。能获得这样的荣誉，能有这样的底气在行业里率先执行“可靠性标准”，源自志高一直坚持以“精品品质”打造核心竞争力。创业多年，志高在品质管理方面坚持精益求精，兢兢业业走出了一条属于自己的路，也赢得了消费者认可。这一期，《志高镜刊》编辑采访了品质中心成品检验部赵国义部长，为您展现志高在品质管理的探索上所走过的这条平凡却又光荣的路。

1、很高兴有机会采访赵部长。赵部长的职业发展生涯伴随着志高的发展壮大，也是品质中心的创建者之一。首先请赵部长谈一下品质中心的发展史

答：好的。我是1996年加盟志高的，当时主要负责设备管理。在2004年年底前，品质控制还隶属技术中心总工办下面的一个小部门，随着公司规模的日益扩大，保持品质的独立性和各种体系的日趋完善，品质管理迫切需要一个独立的部门进行运行操作，就这样，品质中心在2004年底成立。成立之初，当时的品质中心只有品质部、品检部和计测部三个部门，我负责中心的计测部门。当时的测试设备相对简陋，和同行的实验室对比，我们的设备远远落后他们，严重滞后公司的发展要求。

公司提出要建造一流的实验室，接到这个任务后，我日夜钻研怎么把实验室建起来。这样的工作也没什么经验可借鉴，基本上就是摸着石头过河。通过外部观摩学习，克服了各种困难把第一个实验室建了起来。第一个实验室建立起来后，信心大增，陆续其他实验室也慢慢建立起来。到目前为止，品质中心拥有国内外先进的仪器设备2000多台（套），仪器设备原值近1.7亿元；100多个检测中心，其中18个通过国家认可，5个通过国际组织认可；投资1200万元国内外最

Department and Measurement Department for which I was mainly responsible. At that time, the testing equipment was relatively simple, compared with our competitor's laboratory, our equipments fell behind them, which seriously lagged behind the company's development requirements.
After receiving the mission that we proposed to build first-class laboratory, I bestowed my time on how to build it day and night. We had no experience to study but felt our way along inch by inch. And finally we succeed in building up the first laboratory through external observation and overcoming various difficulties. From then on, we became more confident and slowly set up other laboratories. Until now, Quality Management Center has 2000 sets of world class advanced equipments, cost estimation value has amounted to 170 million Yuan. We are in possession of more than 100 testing centers, 18 of them through the National Accreditation, and 5 recognized by international organizations. 12 million Yuan were invested into the most advanced heat equilibrium laboratory, and 3.3 million Yuan on the minimum noise testing room. We become the first-man to establish the advanced and reliability laboratory in AC industry.
With more perfect quality management and the introduction of good managerial talent, we have made corresponding adjustments to organizational structure to conform to company's pace of development. Center of Quality Management is divided into four departments, namely, Central Office, Quality Control Department, Raw Materials Testing Department and Finished Goods Inspection Department. The former Measurement Department is changed into Testing Center, still affiliate to Finished Goods Inspection Department. I was appointed as the superintendent of this department.

Q2: What kind of development process does Quality Center went through and what results achieved?

Zhao: It can be said that we experience from the primary small workshop of thinking to working by procedure, from the original fire fighting to putting prevention first. So it is not excessive to describe it as heaven and earth turning upside down. Because of the strategical upgrade of quality, CHIGO's brand concept is evolved into today's "world quality, Chigo creation."
Since 2005, the company has conducted major strategic adjustment and made great investment in many respects, like the human and non-human sources, quality management and procedure control. At first, we employed exceptional talent from AC industry and adopt testing equipments, all of which are catching up with advanced world level, such as the precision enthalpy, heat balance, and noise inspection laboratory. Only investment in equipment assets reached 1.7 billion. Secondly, at system management, we integrate the company's four systems (ISO9001, ISO14001, QC080000 and OHSAS18001) and strengthen the systematic auditing and counseling capacity, which help our company to pass the inspection of exemption from export inspection and 12

先进的热平衡法实验室；投资330万元国内外本底噪声最低的噪声测试室；拥有行业最先建成的先进性可靠性实验室。

顺应公司的发展步伐，随着品质管理工作越来越完善，引进优秀的品质管理团队，我们对组织架构也做出了对应的调整。品质中心调整为中心办公室、品管部、原材料检验部和成品检验部等四个部门，以前的计测部现改作测试中心，仍属成品检验部，公司委任我作成品检验部负责人。

2、品质中心成立至今，经历了什么样的发展过程，取得了什么成效?

答：可以这样说，由原先的小作坊思维，发展到用流程办公；由原先的“救火”，到现在的预防为主。可谓用“天翻地覆”来形容也不为过，正因为品质战略的升级，志高的品牌理念才演变成今天的“世界品质，志高创造”。

自2005年开始，公司进行了重大的战略调整，在质量管理、过程控制等领域加大人力、物力方面的投入。首先，中心聘请了行业杰出的质量管理人才加盟，采用了达到国际先进水准的高精度焓差、热平衡、噪音试验室等检测设备，仅设备资产投入就达到了1.7个亿。其次，中心在体系管理方面，整合了公司的四大体系（ISO9001、ISO14001、QC080000和OHSAS18001），加强了体系审核及辅导能力，使公司顺利通过了国家出口免验检查，12家国际知名客户的审查，并得到客户高度认可；第三，引进先进的质量改进理念，用六西格玛方法对公司产品进行持续改进。第四，在品质承诺方面，公司坚持实施“零配件终身免费更换”制度已经8年，这不仅在行业内是唯一一家，在全球也是唯一一家，而且在国内率先推出了“产品质量承诺召回制”措施。

internationally renowned customers' review and to be highly admitted by customers. Thirdly, we introduce advanced quality improvement philosophy and made continuous improvement to our products with the Six Sigma methodology. Fourth, in the matter of commitment to quality, our company has been the only enterprise to adhere to free lifetime update for spare parts for 8 years at home and abroad. And meanwhile, we take the lead in introducing new measures for commitment to recall product for quality issues in China. It is the responsibility of our department to inspect the quality. Finished product quality testing is not only the last link for quality control but also is the highly risk link. Once defective product flows into market, our company will suffer from irreparable economic and reputation damage. Through our efforts, our company's degree of market satisfaction has exceeded our competitors'.
Now we witness the overall transformation from total quality control to total quality management. Stemming from our confidence in the own quality management, we have made a commitment in AC industry that CHIGO's residential Air conditioning have a six-year guarantee, so does the compressors.

Q3: As far as I know, since 2007, we have promoted the QCC activities in our company, which were appreciated by lieferants and our suppliers. So please tell me what's form and its purpose of the QCC activity?

Zhao: QCC is one of quality improvement activities for all workers and staff. The main purpose for organization this activity is improving for production quality, raising personnel competency, reducing consumption, and improving economic returns. It's run by using of quality management theory and methods. We have promoted this activity for a period of time and won strong support from senior management, and has also been praised by all employees. QCC group activities, voluntarily participated by staff, utilized the free time to improve the things around us, enhance efficiency and reduce costs. By joint efforts, we effectively eliminate waste and improve efficiency. We advocate a little improvement for each person every day, it can provide impetus to the company's overall quality improvement. By fanning out from point to area, we can enhance the quality management level.

Q4: Random inspection for finished products is very important link in the process of quality management. May I ask you what measures we have adopted to ensure the final product can meet market's demand?

Zhao: Quality testing for finished product is not only the last link for quality control but also is the paramount link. If we do not grasp this link, and let the products flow into market,

作为成品检验部门的职责，成品检验是产品质量控制的最后一环，也是风险最大的一环。一旦让不良品流入市场，公司在经济和名誉上的损失就无法去衡量。通过我们的努力，市场满意度已超过优秀的同行业。

现在我们正由全面质量控制（TQC）向全面质量管理（TQM）转型，源于我们对自身品质管理的信心，在行业里，我们现在能提出“志高家用空调整机包修六年，压缩机包修六年”的承诺。

3、据我所知，我们自2007年起推广QCC活动，得到了公司、配套厂和供应商的认可。请问，QCC活动是怎样的操作形式呢？它的出发点是什么?

答：QCC活动就是全员质量改进活动的方法之一，主要是一线的员工以改进质量、降低消耗、提高员工素质和经济效益为目的组织起来，运用质量管理的理论和方法开展活动的小组。 我们推广QCC活动已经有一段时间，得到公司高层的大力支持，也得到了全体员工的认可。现在QCC小组活动主要以员工自动参与，利用工作外的时间对身边的事情进行改善，提升效率，降低成本。通过各个QCC小组的努力，有效地杜绝了浪费和提升效率。我们提倡每人每天提升一点，带动部门、公司整体的质量提升。通过这样以点带面的方式，大力提高公司品质管理水平。

4、成品抽检是品质管理流程中重要的一环。请问我们现在都采用什么办法来保证最后的成品是符合市场要求的呢?

答：成品抽检工作是成品检验当中成品出厂前的最后一道关卡，也是最重要的一环，如果在此道关没有把握好，产品质量在市场上的控制难度非常大，不仅经济上的损失，公司的声誉也同时受损。

it is very difficult for us to firmly control the quality and we will suffer from irreparable economic and reputation damage. Currently, if customers have no special requirements, we make casual inspection in accordance with GB/T2828.1–2003, and do testing inspection based on GB/T7725–2004. On the contrary, if customers have special demands, we will make inspection as their requests.
In additional, before transportation, we will do the random inspection, such as second leak detection and appearance inspection for finished products. Only through setting up successive check, we can effectively control the quality at the lowest point of risk. Through our efforts, product's failure rate is less than our excellent peer companies; product quality is reaching industry–leading levels.

Q5: After the outbreak of financial crisis, energy-saving products become mainstream; many countries have enhanced the energy efficiency rating for air conditioners. So it means whether they have any new requirement on our quality management. If so, how do we grasp market opportunities and ready for the challenges in this transformation process?

Zhao: Yes, Energy–saving products become mainstream in home appliances industry. In fact, it mainly tests the gold content of company's technology. Enhancing the energy efficiency grade this time will make the upgrading of technology system sustain rigorous test. At present, our competitors sell DC inverter air conditioners which have become the mainstream products on the market. It is my biggest challenge and opportunity to effectively control the quality of DC inverter air conditioner. Therefore, the most important issue we are facing now is how to maintain the stability of product performance.
Energy–efficient products require higher levels on technological consistency and smaller fluctuations on performance. You see, it is easy for us to maintain consistency of performance when producing a piece of DC inverter AC, but it is difficult to maintain consistency of performance when mass production of the DC inverter AC. Therefore, we set up a project improving the stability of energy efficiency products. Through this project, we guarantee the consistency of product technology, consistency of pivotal parts and consistency of inspection and so on. Driven by this project, the stability and reliability of machines have been greatly improved which provide escort for products to gain market share quickly.

目前，如果客户的订单没有特殊的要求，我们依据GB/T2828.1–2003的要求进行抽检，依据GB/T7725–2004的要求进行测试检验。如果客户的订单人特殊要求，我们就按照客户的要求进行检验。
另外，在产品出厂前还要进行交付检验，如成品二次检漏、成品外观检验等。只有通过一层层的把关，有效地把产品风险控制在最低点。也通过我们的努力，产品故障率已低于优秀的同行企业，产品质量达到行业领先水平。

5、金融危机后，节能环保型产品逐渐成为主流，许多国家都提高了空调的能效等级。这对我们品质管理工作提出了什么新要求吗？如果有，在这样的转型过程中，我们如何把握市场带给我们的机遇与挑战呢？

答：对，节能环保型产品逐渐成为家电产品的消费主流，其实也主要是考验一家企业的技术含金量。此次的能效等级的提升，也是对公司技术系统的升级的考验最严峻。目前，同行业都在推变频空调，变频空调已成为市场上的主流产品，而对变频空调的质量有效管控，是我们目前最大的挑战，也是我们的机遇。所以，我们现在面临最重要的问题是如何保持产品性能稳定性问题。

高能效的产品要求工艺一致性水平更高，性能波动量更小。你知道，做好一台变频机容易，但是要保持大批量生产的变频机的性能一致性很难。为此，我们成立了《提高产品能效稳定性项目》，通过项目，我们保证了“产品工艺的一致性”、“关键零部件的一致性”和“检验的一致性”等。通过项目带动，我们的变频机的稳定性和可靠性得到极大的改善，也为产品能快速占领市场保驾护航。

家用空调
94款 / Split No. 94

1. Fashion while simple outlook.
2. Display of set temperature, timer, error code, wind speed and sleep mode.
3. LCD remote controller ,more convenient.
4. Durable world–famous compressor.
5. Low–noise cross flow fan.
6. Sending wind in three–dimensional way, more than comfort
7. Apply at V, M, P, W core.

特点：
1、时尚简约的外观设计
2、可显示温度、定时时间、故障代码和风速、睡眠
3、采用液晶屏遥控器，操作方便
4、国际品牌压缩机，强劲、耐用、节能
5、低噪音轴流风机
6、立体送风、舒适感强
7、适用V、M、P、W内核

商用空调
天花机/ Commercial AC Ceiling Cassette

Features

Indoor Unit

1.Ultra thin machine body to easy installation and maintenance. 24K:230mm, 30–48K:285mm.
2. Different color panels to choose: Gray, White
3. The swing angle of the first louver are 70 degrees and the second louver are 40 degrees.
4. 3 speeds available, optional super high fan speed design, suitable for the large building over 3m high.
5. Stylish design is harmonious with any interior decoration and creates and elegant environment.
6. Built–in water pump with 1200mm pumping head.

Outdoor Unit

1. High quality coils: The coil is constructed of advanced inner grooved copper tube and aluminum fins.
2. Low operation sound level: Well–known stable and quiet running fan motor.
3. Well–known compressor.
4. Compact design: Smaller dimension and larger stuffing capacity.
5. R410A environment friendly refrigerant.

室内机特点

1、超薄主体设计，容易安装维护。主体高度：24k, 230mm; 30k~48k, 285mm
2、白色可选面板
3、导风角度大
4、三速风档设计，可选超大风量，可满足高层大型建筑需求
5、时尚设计，能满足室内装潢要求，舒适优雅
6、内置扬程1200mm的排水泵，方便使用无忧

室外机特点

1、高质量换热器：换热器是由高效内螺纹铜管和铝翅片组成
2、宁静运行：稳定、低噪、名牌风机
3、使用名牌压缩机
4、紧凑设计，小尺寸，大专柜量
5、 使用R410A环保制冷剂

Inverter And Chigo
变频空调与志高

Editor's Word: In the fully developed air conditioning industry, many enterprises are looking for the blue ocean relating itself development. The inverters born of "green and energy saving", it absolutely becomes the next blue ocean target of the AC industry. As the green keeper of the earth, what development history do inverters go through? What is CHIGO's story on this extending process? For this issue, we invite Fang Xiangtao, director of CHIGO's electronic research institute and Tan Lanbo, the assistant general manager of dept. 1 of European Market, to share with us their feeling of developing the inverters technology and extending the inverters market.

编者按：在空调业充分发展的今天，许多企业都在寻找着关乎自身发展的新蓝海，而变频空调由于其一出生就具备的"绿色、节能"特点，理所当然成为空调业争夺的下一个蓝海。作为地球未来绿色的守护者，变频空调走过了怎样的发展历程呢？志高在这片蓝海的开拓过程中，又有着怎样的故事呢？这一期，我们邀请了志高研究院电子研究所所长，方湘涛和欧洲一部总经理助理，谭兰柏，和我们分享他们对变频空调技术和市场开拓的心得体会。

CHIGO's Inverters, Exporting GREEN to the World

Written by Fang Xiangtao, Director of CHIGO's Inverter Electronic Research Institute

With the advantage of comfort and high SEER, inverters are being more and more popular among the consumers, it has been the mainstream of the future AC industry along with people's improving life level. Now, under the guide of government policy and the leading AC enterprises, inverters are taking more and more market share. CHIGO has invested a lot to inverters and had made some achievement on the AC industry in recent years. Here we will give more detail information about CHIGO's inverters to make the readers get a deep understanding of CHIGO's inverters.

One. The Development History of CHIGO's Inverters

Inverter air conditioner originated in Japan, its essence is by adjusting the compressor speed to control the whole unit's the cooling / heating capacity to make it adapt to the room heat load, and achieve the stability in the role of thermostat. Because the compressor motor and variable speed drives in different ways, inverter air conditioner goes through several developing steps, such as AC inverter, 120-degree square wave DC inverter drive, 180-degree sine wave DC inverter drives, etc. At present the industry's most advanced drive is 180-degree sine wave drive. The program has a clear advantage in improving efficiency, reducing noise and vibration and so on. Due to various complex operations, sine wave program requires using high-speed DSP microprocessor chip.

A couple of years ago, our inverter air conditioner is not on mass production, main in developing DC inverter air conditioner based on square-wave drive with outsource electricity control factory, simultaneously going on the master plan and the integration of indoor and outdoor unit communication protocols, creating conditions for mass production of inverter air conditioner.

With company's deeper promote to inverter air conditioner, we need urgently to research and develop independent DC inverter controller as to reduce production costs, which make sure that Chigo has the core control technology of inverters. Since 2008, our company has established Institute of Inverter Electronics Development Department and inverter electronic control for DC inverter in the Institute of Research and Technology Center, doing independent research and develop on the DC inverter single and dual one. Now CHIGO has had a full control of the industry-leading 180-degree sine wave drive program, and has developed independent intellectual property rights of DC inverter products. In the future, CHIGO's DC inverter air conditioner will have a improvement on the compressor motor efficiency, wide frequency operation, all DC-based and new mode of speed adjusting to further improve the comfort and energy saving and environmental conservation of our inverter air conditioners.

Two. The Advantage of CHIGO's Inverters

In recent years, CHIGO has focused on the DC inverter technology development and accumulation of production processes. Currently we have mass produced inverter single, inverter several, inverter PTAC and North American energy-efficient products based on sine wave program, and a considerable part of the field is an industry leader. Though our inverter air conditioner started late, it has certain advantages on dependent development and production of inverter air conditioner.

(1) high starting point, has the backwardness advantage: Our company started the development of the most advanced 180-degree sine wave program, we can learn more experience from our peers with less detours.

(2) technical solutions and product planning ahead: CHIGO has achieved the electronic control master plan and unified indoor and outdoor communication protocols in the inverters technical reserves and overall planning stage, and has designed interchangeable indoors of the inverter single and several.

志高变频空调，向世界输出"绿色"

文/志高变频电子研究所所长 方湘涛

变频空调具有舒适及季节能效比高等优点，随着人民生活水平提高，越来越得到消费者的青睐，是空调行业未来发展的主流方向。目前，在政府政策指引及行业几大龙头企业的力推下，变频空调正占据越来越大的市场份额。志高近年明显加大了对变频的投入，在行业里亦取得一定的成绩。今天在此详细介绍我司变频空调的发展历程和成就，让读者对我司变频实力有更深入的了解。

一、志高变频空调发展历史

变频空调起源于日本，其本质是通过调整压缩机的运行速度，从而控制整机的制冷/热量，并使之适应房间的热负荷，从而实现稳定调温的作用。由于压缩机电机及其变速驱动方式的不同，变频空调经历了交流变频、120度方波驱动直流变频、180度正弦波驱动直流变频等几个发展阶段。目前行业最先进的驱动方式为采用180度正弦波驱动。该方案在提高效率、降低噪音振动等方面具有明显的优势。由于各种运算处理复杂，正弦波方案需采用DSP等高速微处理芯片。

前几年，我司变频空调未形成大规模生产，主要与外协电控厂合作开发基于方波驱动的直流变频空调，同时进行主控方案及室内外机通信协议的整合，为变频空调大规模生产创造条件。

随着公司对变频空调的推广力度加深，迫切需要自主研发直流变频控制器，以降低生产成本，保证公司对变频核心控制技术的掌握。2008年起，公司分别在研究院及技术中心成立变频电子研究所与变频电控开发部，针对直流变频一拖一及直流变频一拖多进行自主研发。目前已完全掌握行业领先的180度正弦波驱动方案，并在此基础上开发了具有自主知识产权的直流变频产品。未来志高的直流变频空调将会在压缩机电机效率、宽频率运行、全直流化、新型调速方式等方面进行改进提升，以进一步提高我司变频空调的舒适度与节能环保水平。

(3) more advantages on energy efficiency: We have many refrigeration systems engineers in the leader industry, and the most energy-efficient inverter air conditioner is successfully developed by our company.

In particular, we have had independent research and development in the electronic control. Electronic control is the core and key of Inverter air conditioner. As the core technologies are handed in Japanese and U.S. companies, there are not much Chinese air conditioner manufacturers have the ability to achieve independent R & D of inverter electronic control. In recent years, industry leaders has joint venture with Toshiba, Daikin and other Japanese companies as well as technology buying to achieve the independent research and development of DC inverter electronic control, and on this basis to promote inverter air conditioner. By the introduction of outside talents, increasing financial and material resources, we have successfully achieved the independent research and development of DC inverter electronic control in 2010. I think it has at least the following four meanings on this achievement:

(1) real ownership of the core DC inverter technology, only an enterprise adhere to independent innovation and take the path of the core technology R & D, it will have the core position in the industry.

(2) to ensure the continuity of company's technology, and to prevent the outflow of various companies' core technology.

(3) significantly reduce procurement costs and shorten the development period. For example: for the DC inverter PTAC, our self-developed 180-degree sine wave program has RMB 100 production costs less than the Association offer and 2 months development period shorter.

(4) Has a greatly improvement on the product delivery time, large-scale procurement, after-sale protection, etc.

Three. Suggestions of Selecting Excellent Inverters

With the inverter air conditioner being the mainstream of market, a variety of concepts related with the inverters are endless. Here, I provide some suggestions for customer selecting good inverter air conditioners. The purpose of consumers to buy air-conditioning is cooling, heating, dehumidification and other basic functions, with the pursuit of energy efficiency, comfort, low noise. Inverter air conditioner has the advantages mentioned, so it's wise choice of buying inverter air conditioner. However in the purchase of inverter air conditioner we need to note the following:

(1) driver program choice: 180-degree sine wave drive program can improve the motor efficiency, reduce noise and vibration with a clear advantage compared to the 120-degree square-wave program, so consumers should be preferred the sine wave drive program.

(2) Frequency range: the wider frequency range can be adjusted, the greater load ability inverter air conditioner has, the more comfort the user's environment, thus we should try to use wider frequency range inverter air conditioner.

(3) energy efficiency ratio: the higher EER, the lower air-conditioning power consumption and more energy saving under the same condition, however price of the energy-efficient product will increase, which requires consumers to balance priority.

(4) indoor and outdoor fan motor: DC motor has the advantages of high efficiency, wide speed range and low noise, so the indoor and outdoor fan using the DC motor of full DC inverter air conditioner, the energy saving and comfort will be increased accordingly.

Understand the basic characteristics of the inverter air conditioner, consumers will be able to clearly identify the various concepts on the market speculation, thus select a suitable inverter air conditioner.

Four. The Development Strategy of Chigo Air Conditioner

CHIGO has an excellent R & D team with Dr. Zheng Zuyi as the leader. There are many fabulous technical experts in air conditioning systems, structural design, electrical control design and other professional field, in order to ensure the company's leading position in technology, they are doing research on various forward-looking technology.

At present, our company has formed three R&D system, namely market products, reserve products and technology research, and has built the forward-looking and key technology R&D platform based on CHIGO's Research Institute and postdoctoral workstation to provide advanced technical reserves; has set up market demand-oriented R&D institutions to market new products with technology leadership and timely development. New product development in our adopted "pre-research generation, development generation, production generation" as a standard to ensure our company a leading position in technology and strive to realize from the "run with" to "lead" by leaps and bounds.

For the future development of air-conditioning industry trends, many manufacturers are now pushing the concept of networking, strongly advocates that the development of networking is the new trend of home appliances in future. As far as I know, the core and foundation of networking is internet, it is a net based on the extension of the Internet. Networking can also be understood as the realization of home appliances network connecting and communications such as air conditioners and refrigerators.

Our current technology in theory can also realize home appliance network connecting and take access to Intranet or Internet through embedded system. But I think the essence of air conditioner is adjusting temperature, humidity to create a comfortable living environment for human beings. Energy saving, environmental protection and comfort are still the mainstream of air conditioning industry in recent years, and also develop along with these themes. As for the home appliances network connecting, we are not excluding to apply it in some special places such as: high-end residential, luxury hotels, communication base stations, etc.

2010 is the 16th anniversary year of CHIGO's founding, after 16 years' stable development, CHIGO is getting the target "make human's life better and better" step by step, and we believe CHIGO's inverter air conditioner will bring consumers more surprise and export GREEN to the world in the near future.

二、志高变频空调的优势

近年来，我司加强了直流变频的技术开发与生产工艺方面的积累，目前已批量生产基于正弦波方案的变频一拖一、变频PTAC、变频一拖多、北美高能效变频系列等产品，相当一部分领域处于行业领先地位。我司变频空调虽然起步偏晚，但在变频空调自主开发与生产方面具有一定的优势：

(1)起点高，具有后发优势：我司起步即开发当前最先进的180度正弦波方案，可以更多借鉴同行的经验，少走弯路。

(2)技术方案及产品规划超前：我司在变频技术储备及整体规划阶段即实现各电控主控方案及室内外通信协议统一，同时实现了变频一拖一及变频一拖多的室内机互换。

(3)能效方面具有较大的优势：我司拥有多名行业领先的制冷系统工程师，行业内能效最高的变频空调即由我司成功开发。

特别值得一提的是，我们在电控上实现自主研发这一成绩。变频电控是变频空调的核心与关键。由于核心技术都掌握在日美企业手中，中国空调厂家能实现自主研发变频电控的企业还不多。近年行业龙头企业于相继通过与东芝、大金等日本公司合资及技术购买等方式实现了直流变频电控的自主研发，并在此基础上大力推广变频空调。我司通过引进外来优秀人才，加大财力、物力的投入，于2010年成功实现了自主研发直流变频电控。我认为我司在变频电控上实现自主研发，至少具有以下四方面的意义：

(1) 真正自主掌握直流变频的核心技术，一个企业只有坚持自主创新，走研发核心技术的道路才能使我们有行业里的核心地位。

(2) 可保证公司的技术持续性，同时可防止公司各类核心技术的外流。

(3) 采购成本方面有明显的降低，开发周期缩短。例如：针对直流变频PTAC，我司自主开发180度正弦波方案，生产成本比外协电控厂报价低100元以上，开发周期相比亦缩短2个月左右。

(4) 产品交货期、规模化采购、售后保障等方面均有较大的提高。

三、挑选优秀变频空调的一些建议

随着变频空调成为市场主流，各种与变频有关的概念层出不穷。在此，我也为客户挑选好的变频空调提供一些建议。消费者购买空调的目的就是制冷、制热、除湿等基本功能，追求的是节能、舒适性、低噪音。变频空调具有前面所述优点，因此购买变频空调是一个明智的选择，但在选购变频空调的同时还需注意以下几点：

(1) 驱动方案的选择：180度正弦波驱动方案能提高电机效率，降低噪音和振动，与交流变频及120度方波方案相比，具有明显的优势，因此消费者应优先选用正弦波驱动方案。

(2) 频率调节范围：可调节频率范围越宽，变频空调对负荷适应能力就越强，用户所处环境的舒适性也好，因此应尽量选用频率调节范围宽的变频空调。

(3) 能效比：能效比越高，同等各件下空调耗电量就越低，更加节能，不过高能效产品价格亦会相应增加，这就需要消费者权衡二者之间的轻重了。

(4) 室内外风机：直流电机具有高效率、宽调速范围及低噪音等优势，因此室内外风机采用直流电机的全直流变频空调，其节能及舒适度亦会相应提高。

明白了上述变频空调的基本特点，消费者就能清楚甄别市场上的各种概念的炒作，从而挑选一款合适自己的变频空调了。

四、志高空调发展战略

我司拥有郑祖义博士领军的优秀研发团队。在空调制冷系统、结构设计、电控设计等专业均有许多优秀的技术专家，为了保证公司技术上的领先地位而进行各种前瞻性技术的研究。

目前，我司已形成了市场产品、储备产品、技术预研三级研发体系，并搭建以志高研究院及博士后工作站为基础的前瞻性、关键性技术研发平台，为公司提供了超前的技术储备；搭建以市场需求为导向的应市产品研发机构，确保技术领先的新产品及时开发并投放市场。

在新产品开发中我司亦以"预研一代、开发一代、生产一代"为标准，保证公司技术上处于领先地位，力争真正实现从"跟跑"到"领跑"的跨越。

对于空调业的未来发展趋势，现在有许多厂家力推物联网的概念，大力鼓吹物联网为未来家电发展的新趋势。据我所知，物联网的核心和基础是互联网，是在互联网基础上的延伸和扩展的网络。物联网家电也可理解为实现空调、冰箱等家电产品的网络互联及通信。

目前我司技术在理论上也可通过嵌入式系统，实现家电的网络互联，并接入Intranet或Internet。但我认为，空调的本质是调节温度、湿度并为人类创造舒适的生活环境。空调行业近几年的主流还是节能、环保与舒适性，而且亦会沿着这几个主题而发展。至于家电的网络互联，也不排除应用于某些特殊场所如：高档小区、高级宾馆、通信基站等。

2010年是志高创建16周年。16年的稳健发展，让志高一步步地实现其"让人类生活得更美好"的企业愿景，相信在未来，志高的变频空调，也能带给消费者更多惊喜，为世界输出"绿色"。

European Inverter Air Conditioning's Past, Present and Future

欧洲变频空调的过去、现在与未来

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Inverter air conditioning originated from Japan in 1980s, introduced into Europe around mid-late 1980s. Since the European market has always attached great importance to energy-saving, environmental protection, inverter air conditioning was popularized by consumers when came out. The inverter air conditioning's occupancy rate in European market is more than 50% at present. As the great importance of European market, we will grasp the pulse of the future development of inverter air conditioning if we can understand the present and the future of inverter air conditioning. I have been exploiting European market when I engaged in international trade. Today I will share my perspective of the future development of European inverter air conditioning with you by CHIGO's Mirror.

1. European inverter air conditioning development history

There are two kinds of inverter air conditioning: DC inverter and AC inverter, the energy saving of DC inverter is much better than AC inverter. Inverter air conditioning originated from Japan, Japanese government not only strictly restricted the efficiency standard of air conditioning, but also supports Japanese air conditioning enterprises to develop energy saving air conditioning at the same time. Almost 100% of Japanese family used inverter air conditioning by 2006.Inverter aid conditioning occupies great in Europe after being introduced into in late 1980s.With the air conditioning energy saving standard rising in recent years, in 2004,European inverter air conditioning market occupied more than 50%,and 90% of them were DC inverter air conditioning.

The development of DC inverter air conditioning relates directly to the birth of DC motor. Compared with AC inverter air conditioning, DC inverter air conditioning use DC inverter compressor and DC fan motor. DC speed convert needs only one time voltage conversion, and, because this kind of DC motor rotor is permanent magnet, dispense with 3-phase ac asynchronous motor rotor current consumption. Therefore, the energy efficiency saving of DC inverter air conditioning is much higher, noise and vibration is much lower, speed convert function is much better; rotating speed range is much wider, and without the electromagnetic interference of AC inverter. Such makes inverter air conditioning has energy saving, comfortable, environmental protection and health function commonly.

Our company exported the first inverter air conditioning order to Italy successfully in 2003.It was AC inverter air conditioning at that time, but received a large response of local market, and highly speaking of customers. Then, our company received orders from Spanish and north European market, our inverter air conditioning comprehensive entered into the European market so far. The first DC inverter air conditioning independent researched and developed by our company came into being in 2004, the customers of European countries favored it very much on the market. More and more inverter orders placed which strengthen our company position in this market.

2. European inverter air conditioning present situation

The population of Europe is not much; the area is not large, but occupied about 15% of global air conditioning market, so undoubtedly Europe become the rivalry objective of major manufacturers. In recent years, in the European market Japanese and South Korean manufacturers appear more active like Daikin, Mitsubishi, Samsung, etc. Daikin is leading the inverter market development direction among them, this company represented present air conditioning industry especially inverter air conditioning and the development level of technical strength, occupying high market share. In Chinese export enterprise, Gree and Midea take over the lead. They occupy mainstream customers in the market, has a perfect customer structure. But technical requirement in European market is much higher; it makes many small manufacturers halted. So it is a very good opportunity for our company to tap the European market, because we invest much obviously to the field of inverter in recent years, technology and products become mature gradually.

In my opinion, there exists two peculiarities in European inverter market: First, demand is large, but the entry threshold is high. Because European consumers attach importance to energy-saving, environmental protection, they prefer to use inverter air conditioning though the price is higher, Like Japan and American market, Europe is famous for its harsh requirements on technology, and especially after RoHs has been promoted. Therefore, it is very difficult to enter European market. Actually air conditioning technology being developed to today, China's manufacturing technology is not so poor than other countries just because consciousness and brand promotion reasons, Chinese brands can not obtain the due favor but mainly export OEM brand. Second, European market likes comprehensive type cooling and heating solution products. The hottest time in most European countries lasts 2-3 weeks by climate; on the contrary, the cold weather is much more. Accordingly, European consumers prefer not only cooling but also heating air conditioning. Moreover, European buildings are very much of humanism, if air conditioning can coordinate with housing structure, so that can win more consumers. It is the reason why inverter VRF

变频空调于20世纪80年代起源于日本，约80年代中后期传于欧洲。由于欧洲市场历来重视节能、环保，因此变频空调一面世，就受到消费者的欢迎。目前变频空调在欧洲市场占有率高达50%以上。由于欧洲市场的重要性，了解欧洲变频空调的现在与未来，也就把握住未来变频空调发展的脉搏。我自从事国际贸易工作以来，一直负责开拓欧洲市场。今天借《志高镜刊》这一平台，与大家分享我对欧洲变频空调未来发展之道的看法。

一、欧洲变频空调发展历史

变频空调分交流变频和直流变频两种，直流变频节能性比交流变频优越得多。变频空调起源与日本。对于能源严重匮乏的日本来说，政府不仅对空调能效标准进行了严格的限制，同时更大力支持日本空调企业开发节能空调。到2006年，几乎100%的日本家庭都使用变频空调。在欧洲，从80年代后期开始引入变频空调，直流变频就占据了相当大的比重。随着近几年来欧洲有关空调节能标准的不断提高，2004年，欧洲变频空调市场占有率达到50%以上，其中90%的是直流变频空调。

直流变频空调的发展与直流电机的诞生有着直接的关系。与交流变频空调相比，直流变频空调采用直流变频压缩机和直流风扇电机。直流调速只经过一次电压转换，而且，由于这种直流电机的转子是永磁的，省却了三相交流异步电机的转子电流消耗，因此，直流变频空调节能效更高，噪声和振动更低，调速性能好，转速范围更宽，同时还没有交流变频的电磁干扰。这就使得变频空调普遍具有节能、舒适、环保和健康的功能。

2003年我司成功地出口了变频空调第一单到意大利，那时候还是交流变频空调，但在当地市场引起了较大反响，而且受到了客户的一致好评。紧接着，我司又获得了西班牙及北欧市场的变频订单，至此，我司变频空调全面走向欧洲市场。2004年，我司自主研发的第一台直流变频空调正式诞生了，该产品一上市就受到了欧洲各国客户的青睐，大量变频订单纷至沓来，这极大地增强了我司在该市场的地位。

二、欧洲变频空调现状

欧洲人口不多，面积不大，但占据着全球空调市场的15%左右，因此毫无疑问地成为各大厂家角逐的对象。近年来在欧洲市场表现比较活跃的主要是日韩厂家，像大金、三菱、三星等。其中引领变频市场发展方向的主要是大金，该公司代表了目前空调行业尤其是变频空调的发展水平和技术实力，占据着较高的市场份额。在中国出口企业里，走在前面的依然是格力、美的。他们占据着市场上的主流客户，拥有完善的客户结构。但是欧洲市场的技术门槛较高，这使许多小厂家望而止步，这对我司来说却是一个开拓欧洲市场的良好机会，因为近年我们对变频领域投入明显加大，技术及产品逐渐完善成熟。

我认为现在欧洲的变频市场存在以下特点：第一，需求量大，但进入门槛高。因为欧洲消费者普遍重视节能、环保，即使变频空调定价比定频空调高，他们仍然愿意使用变频空调。但是欧洲和日美市场一样，对技术的苛刻也是非常出名的，特别是推广RoHs指令后，所以进入欧洲市场门槛较高。其实空调技术发展到今天，中国的制造技术并不其他国家差，只是由于意识及品牌推广方面的原因，中国品牌得不到应有的青睐，仍然是OEM出口为主。第二，喜欢综合式制冷、制热解决方案产品。受气候影响，欧洲大部分国家夏天最热的时候也就持续2~3个礼拜。相反，天气寒冷的时候较多。因此欧洲消费者喜欢的空调不仅能制冷，还要能制热。而且欧洲的建筑都非常有人文色彩，如果空调能与房屋结构相协调，这样较能赢得消费者青睐。这也是为什么变频多联机组能在欧洲兴起的原因。

我司变频空调在欧洲市场的开拓上也有一定成效。如在2006年，我司的第一台直流变频任意拖产品诞生后，马上获得了欧洲不少客户的订单，包括市场上的一些主流客户，如威能集团等，都与我司签订了直流变频任意拖产品大订单。总的来说，还是属于起步阶段。

units can spring up in Europe.
Our inverter air conditioning made a certain progress on European market exploitation. For example, in 2006 we obtained some orders from European customers when our company's first multi-connected DC inverter product came into being, including mainstream customer like Vaillant Group in the market signed a great order with our company for multi-connected DC inverter product. In general, it was just the initial stage.

3. European market future development blueprint

For the future development of air conditioning field, I think comfortable, energy saving, low carbon and health are consumer's eternal pursue. All changes will proceed round these aspects. Our company pushed "the top of the world" energy saving air conditioning in this August, the new product of Three Super series with season EER up to 8.36 which called "The Supreme Inverter", so that our company complies with the market trend and cater to consumers' demand. This is the top EER of the globe air conditioning industrial public data which indicates "The Supreme Inverter" independently researched and developed by Chigo is the most energy saving inverter air conditioning all over the world. The product was high praised by the society people from all walks of life after it was introduced.
With the hot sell of the "splits" in the market, tons of new concepts appeared. I thought the The Internet of Things will be the bright future of home appliances in the globe as an advanced technique. It will take the important part in the air-conditioning field. In abroad, The Internet of Things wildly rouse the initiative of the whole circle of home appliances. As the secretary Xu said, "The Internet of Things change our time back to Victoria time. It changes our ways of life."
From the first inverter air conditioning to Freon-free inverter air conditioning, then to The Internet of Things open a new page of intellectual age. Every technological innovation brings a new Age of Consumption. To this sense, The Internet of Things is a new direction of air conditioning industry.
For CHIGO, if we want to win much more development opportunities from European market, we must be well prepared as follows:
One, optimize our product structure to make it following the market.
Two, emancipate our minds , active in innovation , and extend our way of thinking ,the routineer is just an ever waiting for chance , but the person who be good at innovation always can find his foothold and remain invincible during competition ;
Three, open up the products which is discrepant, so that we can find more opportunities for cooperation and realize much value;
Four, the only way to win a war is to try to know your prey completely, in other words , we should try to find more market information and status of development . At the same time, we need to pay more attention on the new development of our competitor.

三、欧洲市场未来发展设想

对于行业的未来发展，我觉得舒适、节能、低碳及健康是消费者永远的追求，所有的变化都应该围绕着这几个方面去进行。我司顺应了市场发展趋势，迎合了消费者需求，于今年8月宣布推出一个“世界之最”的节能空调——季节能效比高达8.36的三超王变频空调新品“变频至尊”。这是目前全球空调行业公开数据中所达到的最高能效比，因此标志着此次志高自主研发成功的“变频至尊”是迄今全球最节能的变频空调。 产品一经推出，即受到社会各界人士的好评。

随着变频空调市场的大热，许多新概念层出不穷。我也曾与一些客户交流过。物联网作为一种前沿技术，我认为它未来全球家电产业的发展趋势之一，同时也是空调业发展的重要技术趋势。在国内，物联网技术在中国各大产业中的积极应用大大激发了家电行业的热情。正如中国家电协会秘书长徐东生所言，“物联网时代的到来，就好像第一次工业革命中蒸汽机的发明和应用，彻底改变了一个时代的生产、生活方式，也成为一个创新时代的起点和标杆”。从空调行业来说，从第一台变频空调诞生，到无氟变频引领健康环保生活，再到如今的物联网技术开启全新智能时代，可以说，空调业每一次技术的革新，都开启了一个全新的消费时代。从这个意义上来讲，物联网也是空调业发展的新方向。

对于志高而言，我们要想在欧洲市场上获得更好的发展，必须做好以下几个方面的准备：
一、优化我们的产品结构，使我们的产品结构贴着市场走；
二、解放思想，勇于创新，拓宽我们的思维方式，墨守成规的人永远只是等待机会，而善于创新的人永远都会找到自己的立足点，在竞争中立于不败之地；
三、开发具有差异化的产品，这样才能找到更多的合作机会，实现更多的价值；
四、要做到知己知彼，才会百战不殆，换句话说就是我们要想方设法了解市场信息及市场发展状况，同时还要注意竞争对手发展动态。

Kevin Xiao: Breaking Through At South Asia

肖凤麒：突围南亚

肖凤麒 Mr.Kevin Xiao

No matter seeing at which aspect, 2010 year is an abundance year for CHIGO at South Asia market. The total yearly sale is 138% over the rate of yearly sale target, which is twice of last year's, And also, CHIGO keep its first place at Afghan Market. At the same time, the exploration of India and Pakistan made a breakthrough achievement. All proved that the market share of CHIGO is gradually growing at South Asia market.
"2011 year, we would like to gain 30% increase base on the situation now. I believe that South Asia market will become a more and more important beachhead for CHIGO." Kevin Xiao, general managers of Africa market told reporter.

Fight Challenge with Flexible Tactics

South Asia market includes India, Pakistan, Bengal, Sri Lanka, Nepal and Afghanistan etc. country. India owns the second largest population and its economy keeps fast development, that's why it is a new-rising market and catch more focus.
"Generally speaking, all these country have the following features: first, there is a huge gap among them. For example, India is a rich county and its IT and entertainment industry is very well developed, that's why its need on AC just behind

无论从哪个角度看，2010年都是志高在南亚市场暴发性成长的一年。年度任务完成率超过138%，与去年同期相比翻番有余，在阿富汗市场占有率牢牢占据第一位，印度、巴基斯坦的开拓取得重要进展。无一不说明，志高在南亚的市场份额正逐渐提升。

“2011年，我们要在现有基础上增长30%，相信南亚将会成为志高海外版图上越来越重要的据点。”中非四部总经理肖凤麒如此说。

灵活出击应对挑战

南亚市场目前囊括印度、巴基斯坦、孟加拉、斯里兰卡、尼泊尔和阿富汗这几个国家。印度是世界第二大人口大国，经济发展势头好，是新兴市场之一，因此带动南亚市场备受瞩目。“总的来说，这些国家有着几个特征较为明显。第一，国与国之间差距大，部分国家经济基础薄弱。例如印度是较为发达的国家，它的IT业、娱乐业都较为发达，对空调的需求也仅次于美国、日本、中国等国家之后。有些国家多

America and China such big county. However, some county is not as rich as India in South Asia market, and its requirement on AC is limited. Second, AC is luxury product in most South Asia country. Polarization of rich and poor is an obviously social problem at those countries, so only the rich people could enjoy AC product. Still take India as an example, although its population only less than China, its annual need at AC only between 300 ~ 350 thousand sets while China up to 50~60 million sets. Third, South Asia market is the bottom land of price. Because its unbalance economy and wealth disparity, it decides people at this region is sensitive to price and its per capita consumption level is not high. " Kevin Xiao analyzed for reporter.

On the other hand, for price battle always keeps fighting while the loyalty of clients is low; it is very normal while clients transfer his order for price issue. However, CHIGO still did a good job at South Asia market. According to customs data, the export of CHIGO ranks third for India and Pakistan country. At the same time, CHIGO is long term champion at Afghanistan.

"In my opinion, the reason for our success at South Asia Market is our long term hard-working; ant the other point is that we take flexible sale strategy to face all kinds challenge. For example, at Afghanistan, we knew that the station of America army will bring great need on AC product for new barracks. However, the location of new barracks is dispersed and required quantity is small while the time is urgent. We found a strong dealer work with us after understanding this situation. Each time while troops invite tenders we could react quickly. Because we have reasonable price, quickly delivery and relevant after-sale service support, gradually CHIGO being a famous brand at Afghanistan. " Kevin summarized.

Method for bringing up team members

After graduation at August 2005, Kevin Xiao joined CHIGO and served 5 years. He becomes a sale leader in 5 years and has his team member. In his eyes, to be a top sale must own the following qualification: "As an excellent sale, you are not only good at speaking but also like to thinking. You must always keep this following question in mind, such as what feature of this market? What kind of clients we are handling? What's our strength? How can we attract client's attention? How could we maintain client's relationship? Only work with those question in mind, you could gain a better result. Second, you must be diligent. No matter how good English you speak at college, how smart you are; you had to do every small thing at working. There is no quick way to follow. Third, you must familiar with company product. What features do our products have? What is our company's strength at research? You must be conversant to above questions or that you can't give good support to clients. "

Not only good at develop himself, Kevin Xiao also good at develop his team member. "It is the most important thing to inspire sale's enthusiasm. I prefer to give them authority, so that they can learn to take responsibility for

年经济发展状况一般。第二，空调在该区域市场属于奢侈品，仍需要一个长期的积累。贫富悬殊在这些国家都是较为突出的问题，只有富裕阶层才能享受得起空调产品。就拿印度为例，虽然它人口仅次与中国，可中国一年对空调的需求量为5~6千万套之间，可印度只需要300到350万套之间。第三，南亚市场是世界价格洼地。由于国家发展不均，贫富悬殊，这也决定了该区域人均消费水平不高，对价格敏感性自然高。"肖凤麒分析道。

另一方面，由于价格战一直处于酣战状态，客户的忠诚度非常低，转单是家常便饭。但是志高在南亚市场还是取得了不俗的成绩。据海关数据显示，目前志高出口量在印度、巴基斯坦国家排名第三 ，在阿富汗市场，志高的市场占有率连续多年保持第一的位置。

"能够取得这样的成绩，我想一方面是由于我们多年的苦心经营，现在逐渐有成果。另一方面就是我们采取了灵活的营销策略应对各种挑战。例如在阿富汗市场，我们了解到美军进驻阿富汗市场需要建造大量新营房，并对空调有需求。但是营房所在地较为分散，且量少，对时间要求也比较急。了解到这一情况后，我们找到当地有实力的代理商一起合作，互相支持。每次向美军投标时，我们都有存货供应，且价格好，交货快，有相应的服务支持。慢慢就在阿富汗市场上作出了口碑，推动志高牌在当地成为知名品牌。"肖总结道。

培养团队共同发展

2005年8月大学毕业后，肖凤麒就加入了志高，在这里一呆就是5年。他也从一名单纯的大学生成长为一个独当一面的业务骨干，并能带领团队开创更多业绩。在肖凤麒看来，要成为一名优秀的业务员，必须具备这些条件："一名优秀的业务员，不仅要能说，更重要的是善于思考。你必须经常思考你所负责的市场有什么特点？客户有什么特征？我们的优势是什么？能用什么来吸引客户呢？该如何维护客情关系，才能与客户实现无障碍沟通，才能成为客户最放心的一个人？只有带着这些问题工作，才能取得较好的成效。其次就是要勤奋。不管你在大学基础如何，英语再好，多聪明，在实际工作中都需要你事无巨细，躬身去做，这是没有办法走捷径的。最后，就是对公司产品一定要非常熟悉。我们的产品有什么性质，公司研发方向如何这些问题要烂熟于心，只有这样才能在客户需要的时候，才能支持到位。"

不仅善于发展自身，肖凤麒在发展团队方面也很有一套。"发挥业务员的积极性是最重要的。我倾向于'一个人挑杆子'的培养模式，让一个人把整套业务流程负责到底。这样就特别能培养他们单独作战的能力，让他们学会单独解决许多问题。同时我也鼓励业务员多走出去。我会帮在志高工作一年以上的业务员争取独立出国出差的机会，让他们深入市

the whole sale procedure. I think this way could give them the opportunity to solve problem by themselves. At the same time, I also encourage my team member try to visit clients at abroad. I always will fight for the oversea visit opportunity for them, so that they could see the front-line market situation and catch market information directly while set up a better relationship with clients. Last but not the least; we form a routine job meeting system. We could talk clearly at meeting for each question they meet and provide solution and mental encouragement. It is good for the union of team member. " Kevin said.

Served at CHIGO for 5 years, the most unforgettable thing for Kevin is that he used to work until 2 ~ 3 AM for quick delivery. "At the mid-night of winter, back to dormitory alone that is very impressive." Even though sale job is tough, Kevin gained much happiness for growth: "The co-workers relationship is quiet harmonious, and people is willing to help while you have difficulty. That really make me fell relax and happy. On the other hand, it gives us a good platform to bring ourselves up. That's why I could stay here for 5 years. " Kevin told reporter.

2010 year is a good year for the economy recovery, which also promote the sale of South Asia market. That's why CHIGO could have a good harvest at South Asia market. However, Kevin frankly told reporter that he fell stressed for 2011 year:" Because we did a good job at 2010 year, which surely will catch more attention from our competitors. You can predict the competition will be harsher. On the other point, right now we face the challenge of cost up-rising while clients still hope the price all-time low. All these give us much pressure. But I still confidence for the next year. I believe that it will be not a dream for us to increase at next year for we have the fully support of company. " Kevin summarized at last.

场一线，捕捉市场信息，与客户建立更好的关系。而且，团队之间形成良好的例会制度。在会议上就每个人遇到的问题，一起分析，互相协助解决，提供鼓励支持和帮助。这也有利于形成团结良好的团队氛围。"在志高工作五年，肖凤麒坦言最难忘的事情就是为了尽快出货给客户而每天加班到深夜2、3点，"冬天的晚上，孤单一个人回到宿舍，那种情景让我印象深刻。"虽然营销工作压力较大，节奏也较快，但是这5年还是让肖凤麒得到了许多成长："这里人际关系较为和谐，同事之间倾向与互相支持帮助，这让人感觉愉快轻松。而且有一个较好的发展平台锻炼个人能力，所以不知不觉，我就在这里呆了5年。"

2010年是市场全面复苏的一年，也带旺了南亚市场，所以志高在南亚市场上获得丰收。展望2011年，肖凤麒表示压力很大。"由于我们作出了一点成绩，肯定会吸引竞争对手对我们虎视眈眈，市场竞争将更加残酷。而且现在成本不断上升，市场却希望价格走低，这对我们的工作带来更大的挑战。不过有公司的支持，我们相信明年增长30%的目标不是梦。"肖最后总结道。

Chen Chunxi : Grow At CHIGO

陈春喜：成长在志高

There are a lot of employees served CHIGO for a long time. They come from different region and have different background. Probably the only common point for them is all of them treat CHIGO as another home for them. This term, we are glad that we could interview Mr. Chen Chunxi, the supervisor of business division of technique support department. Let's hear about his growth story.

I am happy for choosing Chigo at the first beginning

Graduated from Guangdong University of Technology at 2001 year, Chunxi joined CHIGO at the same year. As a Cantonese, he never heard about CHIGO before. While he was looking for a job at that time, one of his classmates told him that CHIGO was recruiting which location is at Foshan. He sent CV to CHIGO with a try mind. He joined CHIGO successfully for his major is relevant with AC industry.

"Now I thought back, believed that all is destiny. I am a technique-type person, and take a job relevant with technique, which is suitable for me and I am enjoying my job. That's why I could work here earnest and down-to-earth nearly ten years." Chunxi said.

At 2001 year, the technique support department for export business still not set up. There was only a technique support division, which managed by group labor union, and in charge with product research and technique contract issue. Along with export quantity increasing, CHIGO formally set up technique support department for export business at 2004 year. "At the first beginning of technique support department was set up, the duty of business division is claim clearly. We are major in charge with making technique contract, while technique support is a new job range. Our leader also learns with us from the very beginning. At first, we just handle issue like provide technique documents, solve after-sale problem, assist business negation etc. and right now our job duty includes communicate with internal system, making technique support handbook etc. The support function of technique support department right now is more and more mature after years' development." Chunxi concluded.

"While I first came to CHIGO, the export business was just at its beginning. I witnessed the export quantity grow from 60 thousand set to 200 thousand , 400 thousand, 800 thousand, to today's million sets a year. And I also witnessed we move to new office building from old factory. I can fell and see the growth of this company everyday. It really makes me feel happy. It seems like that I make a right decision to choose CHIGO as my career beginning."

陈春喜 Mr.Chunxi Chen

在志高，有许多服务多年的老员工。他们来自五湖四海，学历背景不一，唯一的共同点就是他们都把志高当成了另一个家。这一期，我们为您邀请到技术支持部业务科科长，陈春喜，一起来畅谈他与志高的成长故事。

为当初选择志高而高兴

2001年在广东工业大学毕业后，陈春喜加入了志高空调。作为广州人的他，当时并没有听过志高空调这家公司。大学毕业开始找工作的时候，有一个同学无意中向他提及佛山这里有家志高空调公司在招人，他就抱着尝试的心态投了简历。由于所读专业为制冷方向，专业对口，很顺利地就加盟了志高。"回想起来，感觉一切也就是缘分吧。自己读技术出身，干的工作又与技术有关，不会想太多，就这样脚踏实地在这里干了10年。"陈春喜笑言。

Chen Chunxi told reporter that "Sometimes I thought about those co-workers who join Chigo with me but leave at last, and I would feel pity for them because they might lose a good development chance."

Team building with two ways

Along with the job duty being more clearly, Chen Chunxi's team member also increase. "Right now there are 3 teams in my division; they are contract team, design team and integrated business team, totally 21 persons. There are two kind of person in my division, one is old staffs who work hardheaded, and the other is fresh graduated who is very young." The team building way for Chunxi is dividing into two methods according to this feature.

For the old staffs already have the sense of belonging to CHIGO, and they are very familiar with CHIGO's culture and working method, Chunxi would encourage them to challenge themselves to inspire their enthusiasm to job. As for the new staff, Chunxi will arrange the older staff teach them to help them familiar with CHIGO's culture and job duty. "Empowerment is CHIGO's management culture. I also prefer to give staff room so that they can show themselves, so that he has job enthusiasm and I have more time to research technique issue. Such way could bring the whole team grow quickly." Chen summarized.

To new staff, Chunxi especially hope they could learn to communicate: "Beyond knowing how to work, it is very important knowing communication. Sometime you had to tell others that doesn't work, and you had to make it sense or that people wouldn't accept it. If you good at communicating, misunderstanding would dismiss." Chen said. He usually encourages staff work more to expand their career. "The competition of today's society is much harsher than before, it will be better for fresh graduated growth if they have a clear career objective. I frequently told fresh graduated that what Chigo could give them and what can't. He could think it clearly and set up his target. I think it will be good for their growth."

As for the future, Chen Chunxi concludes: " Right now we have new movement on after-sale service. At New Year, I hope we could shorten the job procedure and support business much more smoothly. Now my team has a little bit change. I just hope they could grow faster and create more value for the company."

在2001年，负责出口业务的技术支持部尚没有成立。那时候只有一个技术支持科，挂靠在集团总工办下面，负责产品研发和技术合同编制的工作内容。随着出口业务增多，公司在2004年正式成立出口技术支持部。"出口技术部刚成立的时候，业务科的职责较为明确，主要负责编制技术合同，技术支持这一块工作则属全新工作领域。领导和我们一起摸着石头过河。从刚开始的技术资料提供、处理售后问题、协作洽谈业务，到现在与公司内部系统建立畅顺沟通，快速响应市场需求，编制技术支持手册等工作。可以说，技术支持部的功能越来越清晰，对业务支持的作用也越来越明显。"陈说。

"刚来志高的时候，公司业务起步没多久，从开始时的 6 万多套空调。后来20万、40万、80万，到现在上百万，看着公司的业绩每年都翻番地增长，看着公司从厂房搬到崭新的写字楼里工作，每天都感觉到公司的成长与进步，我就觉得很开心，看来当初没选择错公司。"陈春喜和记者说："当初和我一起加入公司的部分同事有选择离开志高的，我有时候想起他们，偶尔也会感叹，不知道他们是否错过了一个好的机会？"

分两步走建设团队

随着工作职责流程日益清晰，团队人员也越来越多。"我这个科室一共有21人，有三个组，分别是合同编制组，平面设计组和综合组。科室人员两极分化严重，一些是脚踏实地的老员工，另一些则是毕业没多久的80后、90后。"针对这样的特点，陈的团队建设也分两步走。

老员工已经有一定的归属感，对志高文化和工作方式都非常熟悉，陈春喜就鼓励他们开拓工作内容，多点尝试挑战自己，从而能激发他们的工作热情。对于新进员工，则通过安排组长实施"一对一"的帮扶形式，来帮助新员工尽快熟悉企业文化、上手工作内容。"授权型文化是志高的管理特色之一，我平时也喜欢放手让下属大胆去发挥。这样他有积极主动性，我也可以钻研技术问题。这样带动整个团队都能快速成长起来。"陈总结道。

对于新进来的员工，他还特别希望他们能学会沟通："除了会做事，也要善于沟通。只有善于沟通，才能将问题降到最低。有时候你要告诉别人这件事情做不了，那么就一定要有理有据，让对方明白到执行不了的原因。善于沟通，能化解很多误会。"除此，他也时常勉励下属多干活，拓宽自己的职业生涯。"现在社会竞争比以往大很多，我们那时候没有职业生涯规划这一说法。有新人进来，我都一定会和他说清楚，这里能给他什么，不能给他什么。他自己考虑清楚，自身有一个努力方向，这样才能成长得快。"

关于未来，陈春喜说："现在对海外业务的售后服务又有新举措。在新的一年，希望缩短流程时间，与业务的对接更加无缝。现在团队也有一些变动，希望团队能尽快成长起来，为公司创造更多价值。"

We Have A Good Beginning

我们和志高有一个好的开始

Written by Mr. Ramiro Trevi 文/Mr. Ramiro Trevi

Firstly, Joanna and Larry are my good friends in the commercial air conditioners department. We have a very good cooperation relationship with CHIGO. Secondly, I am positive at Mexico's economy development. The Mexico political keeps stable; it is good for economic development. On the other hand, Mexico was the allied nations of America; we are more easily to loan from the bank of America. Besides that, we have rich oil resources, a lot of rich people would like to invest house property and it will promote the AC market. Those are the reason for me enters AC market.

For Latin America air conditioners market, Mexico attracts each manufacture's attention for its fast and steady increment. Because of the cost of window type is low, for a long time, window type is the mainstream in market. Along with split technology development, split type AC and multi-split AC are gradually replacing the window type in market. The best market conditions are in 2006 and 2007, and it was in short supply at that time. After the financial crisis, the market began to decline. But it was recovering this year. There are two tornados in Mexico, which affected the sales of the AC. But from the whole view, the AC market is upward developing.

I expected the AC market situation will be better in 2011, and I planed to increase at least more than 50% commercial AC orders from CHIGO in next year. We have made a detail plan for this propose. 2010 year was the first year we cooperated with CHIGO, but we have a very good beginning. We did a success project in Cancun city; which promoted our sale at local market and also good for our future cooperation with CHIGO.

客户来访志高，与业务员合影 Client visited Chigo and took photo with sale

首先，CHIGO商用有我非常好的朋友Joanna和Larry. 我们的合作非常愉快。其次；我非常看好本国的经济发展。首先墨西哥政局稳定，有利于经济发展。其次作为美国的同盟国，我们较其他国家更容易从美国的银行贷款，从而发展本国经济。然后，我们拥有丰富的石油资源，很多石油大亨热衷投资房地产项目，房地产热必定带动空调市场发展。这也是我进军空调市场的原因。

作为拉丁美洲的空调市场，墨西哥以平稳的增速赢得中国各大厂商的关注。由于窗机制造成本较低，因此在很长的一段时间，窗机占据市场主流。随着分体技术发展，分体机和多联机正日益取代以往窗机的市场份额。

2006和2007年的市场状况最好，那时候空调产品是供不应求。但是金融危机爆发后，市场开始衰退。2010年市场开始复苏，但是墨西哥今年发生两次飓风，天气状况影响了空调销售。但是总体来说，市场还是向上发展。

我预料2011年市场状况会更好，因此我计划在来年从志高购买的商用空调将会至少增加50%。我们已经具体做了详细的计划。虽然2010年是我第一年和志高商用开展合作，但是我们有一个非常好的开始。我们合作在勘昆的工程很成功，这让我在当地打开了知名度，也为我日后和志高商用进一步的合作奠定基础。

CHIGO in Italy

志高牌在意大利

Written by Mr. Federico Boggio Sella

意大利客户与志高团队参展合影
Italy clients took photo with CHIGO staff at exhibition

Talking about Italy, what do you think ? Magnificent Venice? Dreamily Rome? Or Magic Leaning Tower in Florence ? You may not know is that CHIGO already entered Italy market more than 7 years. How does CHIGO grow at Italy market ? I am very glad that I could take this opportunity to introduce the growth of CHIGO at Italy market.

How is Italy market?

Firstly, I would like to give you a brief introduction on Italy market. Talking about sales, Italy is the biggest market on mini-split AC. Even though the bad weather and decreased economy has bad effect on the promotion of multi-join unit. Italy and European union are working together to promote the use of heat pump, which successfully push the sale of split, but its increase surely will be effected by financial crisis. That's why the mini-split until today only has less than 30% market share in Italy.

The need on window type is lowest at Italy while mobile AC is developing healthily. The sale of mobile AC still keeps at 130 thousand sets a year for facing the threat of split AC. Right now, 75% split and 60% multi-unit come from Italy local manufacturer. The mainframe (its power over 5KW) and VRF is major used at retail, office building and entertainment. The competition at split is harsh and scattered .In fact all split is import, the local manufactures only take 10% at Italy. The weather of middle and southern of Italy at summer could up to 30~35°C. That's why its sale is huge while its competition also very harsh. Northern economy is better thus AC product could get a better price here.

How is the financial crisis to Italy market?

The economic crisis was very strong and still keeping some effects. We noticed mainly price deflation effects in Europe and opposite in China due to booming growing economy we

提起意大利，你会想起什么呢？也许是风光绚丽的威尼斯，也许是梦一样的罗马，或者是那神奇的佛罗伦萨斜塔。但是，你没想到的是，志高牌进入意大利市场已经长达7年。这7年，志高牌有着怎样的成长历程呢？很高兴能有这样一个机会，来向志高的朋友介绍志高牌在意大利的成长。

一、意大利市场概况

首先向您简单介绍意大利市场的概况。从销售量来说，意大利是欧洲第一大小型分体机市场。但是，由于气候糟糕、当地经济低迷，影响到了新建工程和新技术（多联机组）的普及。尽管意大利和欧盟法规都在推动热泵的广泛使用，这一定程度上拉动了家用一拖一分体机的使用量，但其增长注定受到国际经济危机的影响。所以市场发展多年，但意大利小型分体机市场还很难说饱和，因其在住宅中的普及率低于30%。

意大利窗式空调的销售量是欧洲最低的。相比之下，可移动空调则在健康发展。尽管市场受到单一分体空调的分割导致销售逐步下降，但还是保持在13万台左右。在销售的产品中，单一分体空调的3/4和一对多分体空调的60%来自于意大利本土厂商。大型机（功率大于5kW）和VRF系统用于零售、办公和休闲业。分体空调产业竞争程度很高，也很分散。事实上，所有的分体空调都是进口的，本地厂商的产量还不到内部市场的10%。

意大利的中南部夏季气温较高能达到30-35° C，因此空调销量较多，不过竞争也比较激烈。北部地区因为经济发展较好，空调一般能在卖得比较高的价格。

are seeing price inflation effects. This opposite situation will have the consequence that more and more China will export high tech products and will slow down the export of low tech products. As consequence we are seeing that more and more Europe will buy low tech products from East Europe countries and China will export to Europe only high tech products.
There is a green policy from the Italian government and we got this opportunity to boost our sales. DC inverter is now very common in Italy market and in some North areas the professional channel is distributing mainly inverter air condtioners.

How to promote CHIGO brand at Italy?
We are cooperating with CHIGO since 2002 and we selected CHIGO because CHIGO is a professional brand and has a professional range. As CHIGO brand agent since 2003, we have good experience on brand promotion and here below we list the ways we used to promote our CHIGO brand :
1) Endurance and Loyalty to the CHIGO flag. Since the beginning we concentrate only on the promotion of the CHIGO brand exclusively without wasting our energy to promote other competitors.
2) Technical service. Since the beginning we invested our efforts to set up a complete net of technical service people to cover the full Italian territory and we fixed efficient service procedures in order to control the efficiency of the CHIGO service.
3) New technologies. We mainly used new information technology systems on the B2B channels such as : data base purchase, email newsletter, web site promotion, outbound call center activities to our data base of 25000 potential customers.
In order to improve our technical service efficiency we are regularly training our technical service team and besides that we also started a maintenance strategy in order to grant to the end user a better satisfaction in order to improve brand image.
We think that Chinese companies will follow the trend of Japanese and Korean brands to set up branches and Joint Venture in Europe. We are discussing this project with CHIGO.

二、金融危机对意大利市场的影响

金融危机对欧洲的影响远超我们的想象，即使在全球经济开始复苏的2010年，我们仍能看到它的尾巴。我们留意到，欧洲市场物价出现下降的情况，但在中国物价却保持上涨，因为经济发展势头大好的缘故。这一矛盾将会导致中国未来会出口越来越多高科技的产品到欧洲，并逐渐减少出口科技含量低的产品。我们预料未来我们将会从东欧进口科技含量低的产品，而中国将只出口高科技产品到欧洲。

与2009年相比，虽然遭受金融危机的影响，但是今年我们与志高的业务增长率仍达到30%。每年我们都会定期访问志高，每次都与志高团队相处愉快。金融危机过后，意大利政府也追随低碳型经济潮流，推行绿色政策。我们正把握这个机会推动销售。目前变频空调在意大利市场已经非常普及。在北部一些地方，变频分体机是专业销售渠道的主流产品。

三、志高牌的建设之道

自2002年，我们就与志高开展合作。当初我们之所以选择志高作为事业的伙伴，是因为志高是一个专业的品牌，并拥有专业的产品和团队。自从2003年成为志高牌代理后，通过日积月累的实践，我们在品牌建设方面取得一定成效。下面简单分享一些我们的心得体会。

1、坚持不懈地经营志高牌。从第一天合作，我们就坚定目标，只经营志高牌一个品牌。长期专注经营一个品牌，让我们集中所有的战斗力，这也是志高牌在意大利市场得以成长发展的原因。

2、良好的技术支持。从一开始，我们就投资建立一支完善的技术支持队伍提供优秀的服务。这支队伍提供的服务可以覆盖意大利全境。我们确立了一套高效的服务流确保消费者能享受到志高牌快捷的服务。

3、广泛采用新技术。在商家对商家的电子商务里，我们广泛采用了许多新技术来为客户提供快捷顺畅的服务,例如购买数据库、电子邮件营销、网站促销、呼叫中心等手段为我们25,000个潜在顾客提供服务。

为了提升我们技术服务团队的效率，我们会举办各种各样的培训以保持服务的专业和高效。除此，我们在空调保养方面正实施一项新的政策，希望提高客户满意度从而提升品牌形象。因为志高在中国是一个非常专业的品牌，所以我们在意大利也用专业的渠道（例如大型超市、安装商、分销商）对志高牌进行销售和推广。

关于未来合作，我们认为中国应该追随日韩品牌的发展轨道，在欧洲开始分支机构或合资公司。目前我们正与志高商讨这一合作计划，相信这样的合作方式能推动志高牌在意大利市场取得更好的发展。

CHIGO air conditioning in Aruba

志高空调在阿鲁巴

Written by Mr. Ramiro Trevi 文/Mr. Ramiro Trevi

Our team member at Expo Car 我们在Expo Car上的合影

Today's CHIGO in Aruba ?
For the last couple of years CHIGO has placed itself in the top 3 best selling air conditioning on the island of Aruba.
Customers are beginning to get familiar with the name CHIGO and that is exactly what we want.
When people buy CHIGO they know for sure that they are getting the best air conditioner, the best price and best service locally available.
CHIGO has only 6 years on Aruba, but the public acceptation is very very big. We have sold many air conditioning units and we are very optimistic about the future, although 2010 was not a good year due to the economic crisis.
We are competing against a giant AMC UNICON that has more than 50 years on the island. It's main Brands are PANASONIC, DAIKIN, TOSHIBA and GREE.
It is not easy for us to gain Top 3 position in market in less than 6 years and own 11% market share.

What is our plan for next year?

As you already know this year CHIGO participated at "Expo Cas" (Expo House), and the reaction was excellent. But something caught our attention.
Customers are getting conscious about what their buying, especially if you talk about energy saving.A big percentage consumer ask us about inverter type air conditioning, energy

我们的现状?

经过一段时间的积累，目前志高牌在阿鲁巴市场已经成功跻身前三甲的位置。

消费者对志高牌空调越来越熟悉，这也正是我们所期望的。

消费者购买志高空调，是因为他们清楚，他们以最合理的价格得到了最合适的空调，并且能享受到便捷的售后服务。

志高在阿鲁巴市场只有6年的发展历史，但是公众对志高的接受程度非常高。虽然2010年受金融危机影响，销售成绩不理想。但是鉴于以往我们出色的业绩，所以对于志高牌的发展前景我们非常看好。

要知道，在阿鲁巴市场上，我们的竞争对手都是日韩巨头，而且他们进入市场的时间都超过50年了。所以，我们能在短短6年内，拥有11%的市场份额，冲进行业前三强的位置，这是非常不容易的事情。

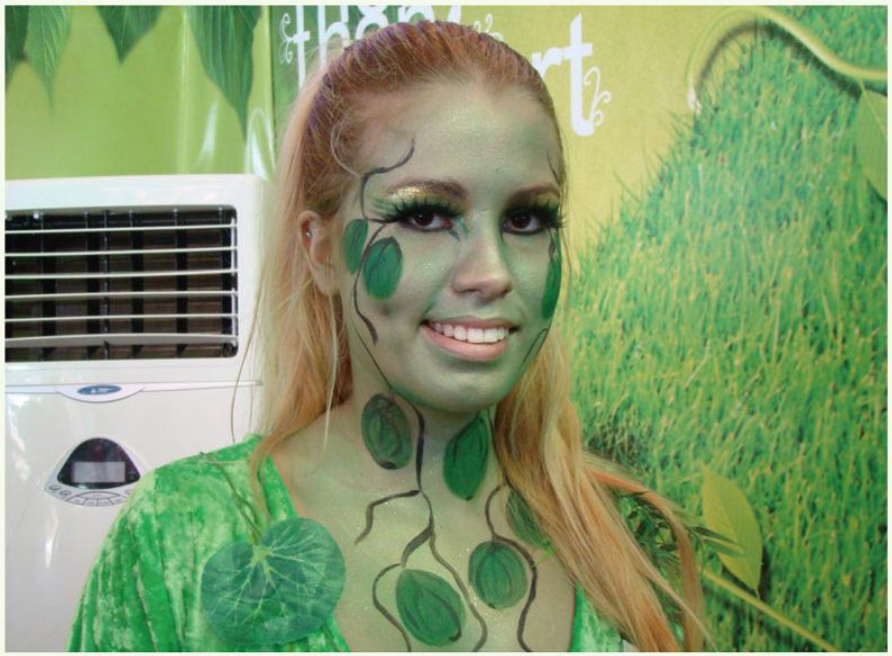
我们明年的计划?

正如你所知的一样，今年志高参与了 Expo House（阿鲁巴极具影响力的展会）的活动，并取得了巨大的反响。但有些事情引起我们的注意。

现在消费者对他们所购买的产品特性愈加熟悉和专业，如果你和他们谈起节能话题，也许他们比你还专业。越来越

saving products. People are getting worried how to lower their monthly electricity bill!
Our plans for next year are:
1) "If CHIGO confirm that the inverter type a/c is reliable for our island" to begin marketing of inverter type air conditioning. This is what the customer wants!
2) we would like to improve our after sales air conditioning services by sending a couple of technicians to get training on how to install , service troubleshooting , repair inverter air conditioning at CHIGO's place .
3) We would also go on television, because as of today we relied only through written press, mouth to mouth marketing, and some radio spots. Actually we do not have any CHIGO TV commercial. We think that if we have a good TV commercial we can certainly boost our sales for the next years.
4) Also what we see as a big opportunity is commercial air conditioning. Our team is right now doing a market research about this type of air conditioning. If business wise it suits us, we will include commercial units in our orders.

多的消费者向我们询问起变频空调的情况，因为他们都清楚其节能的特性。这显示消费者对电费开销的关注度正在提高。为我们明年的计划如下：
1、如果志高确认志高牌变频空调也适用于阿鲁巴市场，那么我们就准备着手大张旗鼓地推广变频空调。这也是消费者所渴望的产品。
2、我们希望进一步提升目前售后服务水平，因此我们有计划在2011年派遣技术人员到志高总部去接受一系列的有关空调安装、维修、保养方面的培训，特别是加强对变频空调的培训。
3、我们也计划在电视上打广告，做宣传。目前，我们宣传渠道主要依靠纸质媒体、口碑营销、和电台广告。如果我们能在电视上做广告，我想我们明年的销售成绩一定会非常漂亮。
4、我们看到了商用空调的日益蓬勃的商机。我们的团队正在开展一项有关商用空调的调研工作。如果结果显示商用空调也适合阿鲁巴市场，我们将会尝试采购商用空调。



A beautiful model we hired at Expo Car
我们在Expo Car上漂亮的女模特

Maersk: Willing to Offer CHIGO Logistics Solutions

马士基：愿为志高提供物流解决方案

Editor's Word :Maersk is a very important partner of our company. As a world-renowned company, Maersk is unique in its service, concept and the operation . In this periodical of CHIGO's Mirror, we are honored to invite Mr. Zeng Fan, the Senior Sales Manager of Maersk Shipping Co., Ltd. (China), to talk about the cooperation between each other freely.

Q1: I am very glad to talk with you in person, Mr Zeng. Maersk is a well-known shipping company all over the world. It has a long-term and stable cooperation with CHIGO. Could you please introduce in brief the cooperation between us?

A: We started to cooperate with CHIGO in 2005. During these 5 years, our relationship is very stable. After the financial crisis, as the adjustment of freight is more frequent, the period of our quotation becomes shorter. Except that, our business and service didn't change a bit. Since CHIGO's exporting business has keep expanding, and you are one of our VIPs in Foshan, we render you a priority of the credit terms as long as 20 days. As far as I know, only a few enterprises in Foshan can enjoy such a preferential treatment .

Q2: As a world-renowned enterprise, the innovation and leadership of service and management in your company are obvious. So what's your company's concept of service? How does this philosophy reflect in the daily work?

A: As our core strengths, we always focus on providing our customers with the service that is of better quality than others in the industry. Maersk always famous for its higher sea freight in the shopping industry. However, the higher sea freight of us are always reasonable, because we always succeed in offering the more cost-effective service to the customers, which makes them feel worthy with more money paid. That's also why we can maintain the number 1 market share in long-term. We focus on rendering reliable service to customers on the correct and fast supply of shipping schedules, vessel spaces, containers, and shipping bills. With these high-quality and stable service, we have got more

编者语：马士基航运是我司的重要合作伙伴。作为全球知名企业，马士基航运在服务、理念和运营上均有其独到之处。这一期《志高镜刊》很荣幸邀请到马士基(中国)航运有限公司高级销售经理，曾凡先生，和我们畅谈彼此之间的合作。

1、很高兴能和您面谈，曾先生。马士基是全球知名的航运公司，与我司有一个长期而稳定的合作关系。能否请您简单介绍一下马士基与志高的合作。

答：我们是2005年与志高建立合作关系。合作5年，我们的合作关系非常稳定。金融危机后，由于运费调整较为频繁，我们的报价期限也比以往有所缩短。除此之外，我们的业务没有任何的变动。由于志高出口业务不断扩大，也是我们公司在佛山地区的重点企业之一，因此长期以来我们给予志高20天帐期的优惠政策。据我所知，在佛山只有少数几家企业能享受到我们公司这个优惠政策。

2、作为一家全球知名的企业，贵司在服务和管理模式上的创新及领先是有目共睹的。能否与我们谈谈，贵司的服务理念是什么？这一理念又是如何体现在日常工作中呢？

答：我们一贯注重提供高出行业水平的服务给客户作为我们的核心优势。在行业里面，马士基一向以运费高而"出名"。但是，我们收比行业略高的运费，并不是没有理由的。我们提供性价比更高的服务水平给客户，让客户物有所值，这也是为什么我们长期能保持市场份额第一的原因。我们注重在船期、舱位、柜子的供应、出账单的速度及准确度方面给客户提供稳定的服务。凭借以上优质且稳定的服务，我们在中国给越来越多的客户提供了服务。

随着技术的发展更新，我们也非常注重使用新科技来提高工作效率。电子商务刚兴起，我们就大力推广使用电子商务平台来解决与客户对接的问题。只要上我们的电子商务平台，就可以实现查询船期、了解报价、定舱、出提单、付款等业务往来。多年的推广和后续的完善，现在马士基98%以上的客户都可以通过网络平台来进行多种业务。

3、金融危机对贵司业务带来了什么样的影响呢？

答：金融危机爆发前，在全球20大航运公司里面，马士基稳居第一多年。但是金融危机爆发后，我们在2009年行业内亏损额排第一。金融危机给我们的业务带来一定的震荡，但是

and more customers in China.
As the technology is more and more updated nowadays, we also attach more importance to use new technology to improve the work efficiency. Just as soon as the the upsurge of E-commerce started, we promoted the use of e-commerce platform to deal with customer widely. As long as you log in our e-commerce platform, you can check the shipping schedules, get the quotations, book the vessel space, issue the bill of lading and pay the bills etc. Years of promotion and follow-up improvement, now more than 98% of Maersk's customers can deal with multiple services through the Internet platform.

Q3: What kind of impact does the financial crisis has caused to your company?

A: Before the outbreak of the financial crisis, Maersk ranked the first place among 20 major shipping companies for many years. But ever since the financial crisis, the amount of loss of our company ranked the first place in 2009. Financial crisis was kind of turmoil to our business on the one hand, but it made us become stronger and more powerful against the stress. In my opinion, since 2009, we has conducted the following adjustment.
1. we attach more importance to the cost control.
2. we change the concept. We used to focus on enlarging market share in the past, but we are more concerned about the profit improvement now.
3. we pay more attention on reaching a win-win situation together with other shipping companies in the industry. We are now trying to co-operate with our competitors to manage the shipping routes together, hoping to take the risk with together and finally achieve better development simultaneously in the end.

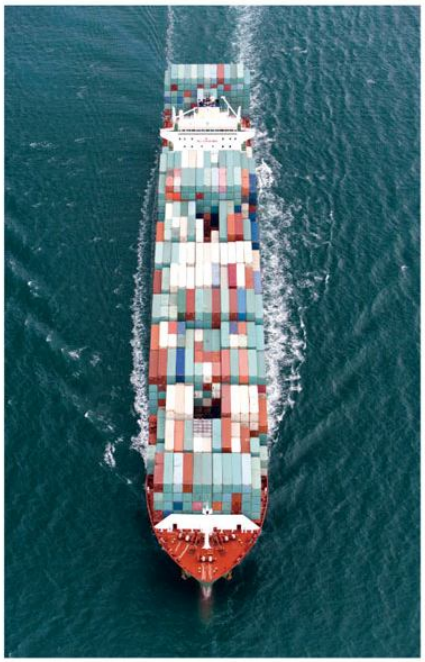
Q4: 2010 is the year when the global economy rebounds. As far as I know, the shipping industry also fully warms up. We could often hearthe news that the vessel spaces and containers are intense, especially in the second quarter when it is the peak season for most routes. How does your companysolve the problem of resources tension, so that you can meet the needs of shipping?

A: After the financial crisis broke out at the end of 2008, the market supply exceeded the demand, and the foreign trade business dropped dramatically. the shipping industry hit the bottom in the early 2009 with 13% idle capacity globally. In the second half of 2009, the industry began to recover quickly. The rapid growth in demand far exceeded the expectations. The freight space and containers could not meet the needs, causing the resource tension for a time.

同时也让我们抗压性更强了。我觉得自2009年开始，我们在以下方面有所改变：
1、更加注重控制成本。
2、观念转变。以往注重提高市场份额，现在更为关注利润提升。
3、注重与同行抱团取暖。我们现在尝试与同行共同经营航线，就是希望一起分担风险，彼此都能取得更好的发展。

4、2010年是全球经济回暖年。据我所知，航运业也全面回暖。尤其是第二季度是多数航线的旺季，不时听闻仓位和柜子紧张的消息。贵司都通过什么手段解决相关资源紧张的问题，从而满足企业的航运需求呢？

答：08年底金融危机爆发后，市场供大于求，进出口贸易业业务大幅下降，2009年初行业跌到最低点，全球约有约13%的运力处于闲置状况。在2009年下半年，行业开始复苏。复苏速度较快，需求的迅猛增长大大超过预期，柜子和仓位出现供不应求的情况，造成了资源一度紧张的局面。不过这种情况也属正常。因为第二季度是出口业旺季的开始，资源都会趋于紧张。



However, this situation is normal. Since the second quarter is the beginning of the peak season of the foreign trade, the resources always tend to be strained.

Q5: The Somali pirates not only put the pressure on the transportation industry, but also bring risk to the international trade. It also occurred in the goods of our company before. What measures and methods will you take to avoid these accidents, or to minimize the loss and damage?

A: Actually, to governance and clear away the piracy should be a behavior of the government level. As a commercial company, it is out of our control. However, after the incidents of piracy in Somalia, when we ship in the area of pirates, we have increased the insurance costs, and we also provide customers with a particular "Somali pirates risk". Now, to protect the interests of our customers and the security of our profit, we mainly resort to these two methods.

Q6: Can you talk about the coming future, how will your company do to serve us better, and then achieve win-win together ?

A: I have employed in the shipping industry for some time, and I also have certain observations of the domestic enterprises and foreign-funded enterprises. As to the future with CHIGO, I hope we can be the logistics solutions partner for CHIGO, to offer the overall solutions for CHIGO's logistics. According to my observation, the understanding of logistics in the domestic enterprises is different from in that of foreign-funded enterprises. The former one has less management experience. They pay more attention to the short-term interestsand the low freight,but the attention on the in-time delivery and other services are always far from enough. The latter focuses on the overall interests and the quality of service. We usually negotiate a price of the whole year with the foreign-funded enterprises. This price in the slack season is slightly higher than the market price, but it is lower than the market price in the peak season.What's more, we also sign a long-term cooperation agreement, which could guarantee them the resources of space and container even though it is in the peak season.In this way, they can always realize the delivery smoothly and punctually.
So, I promote this concept of logistics solutions actively now, and I hope we can supply more overall logistics solutions for more companies in the future.

5、索马里海盗对运输业造成压力，也给国际贸易带来危险。我们也曾经发生过货物被海盗抢劫的事情。请问贵司都有什么样的措施及手段来避免发生以上意外，或将损失降到最低呢？

答：其实治理和清除海盗事件是政府层面的行为，作为商业公司，我们无法控制。不过在索马里海盗事件后，凡是经过海盗猖獗的水域，我们都提高了投保费用，而且我们现在还会为客户特别购买一个索马里海盗险。现在主要通过这两种方式来保障客户和我们的利益安全。

6、能否谈下未来，贵司还将会如何更好地为我们提供服务，从而实现共赢呢？

答：我在航运业也从业了一些时间，对国内企业和外资企业也有一定的观察。对于与志高的未来，我希望马士基能成为志高的物流解决方案的合作伙伴，为志高提供在物流方面的整体解决方案。

据我的观察，国内企业对航运业的理解与外资企业不一样，对物流的管理经验相对较少。他们更看重中短期利益，看重低廉运费，但是对于按时交货等服务关注度不够。外资企业会更看重整体利益和服务水平。通常外资企业和我们谈一年价格，这个价格在淡季的时候比市场运费略高，但是在旺季的时候却比市场价格低廉，而且与我们签订长期合作协议，能让他们即使在旺季时候，在舱位、集装箱资源方面得到一个保障，从而顺利实现按时交货。

所以，我现在都在积极推广这种物流解决方案的观念，希望马士基能为更多企业提供整体的物流解决方案。

Chinese Enterprise: A New Awareness of Branding

中国企业：何时不再步入品牌误区？

Written by Wu jianqiao, from PR department 文/公共关系部 伍建乔

Until today, the Chinese market which has one point three billion populations definitely is the most potential, fast growing and biggest scale market. Regarding to this fresh market, there are still so many business opportunities even under the impact of global financial crisis. After thirty years political evolution, there are various Chinese enterprises have been grown and developed within this large market.

However, the level of market competition has been upgrading. It means there is no such chance for taking break in terms of all the Chinese enterprises. Base on the fast growing of global progress, Chinese enterprises have to prepare two strategies for facing the challenge. First of all, foreign enterprises have been getting into the local market. It makes so many good quality local customers have been attracted by those foreign companies. Moreover, some good quality customers even have been taken by the national enterprises. Therefore, it is one of the biggest threats for the long-term development of Chinese enterprises. Secondly, there are some good performances of Chinese enterprises on exporting to oversea market, but lacking of core technology and mature business brand such are the main issues. Those Chinese enterprises are only able to gain the low end market through manufacturing products with other labels on.

Chinese enterprises compete strongly in oversea market. It is only because they would like to fight the war in oversea. By doing this, there is no such new change but gaining market share and trying to expand market scale. To sum up, no matter in local market or oversea market, Chinese enterprises have to do some homework on core technology and branding. Otherwise, we are just at the bottom of global value chain, and gaining the minimum profits. In addition, there is one thing we are not willing to see, which is never able to get in the main global business society.

Therefore, how to break through core technology and establish business brand are two important topics for all Chinese enterprises. Objectively, we need to establish competing advantage regarding to the aspect of core technology. In addition, the various resources are required maximally and constantly in order to build good foundation. The breakthrough may not be discovered in short-term. However, by doing this, we thus are able to have more ideas on technological innovation. Regarding to brand establishment, the most difficult point is to chance the one between following business ethic and insisting core business value. The business environment is so juvenility and irregular in china. Thus, it obviously is a big challenge for the Chinese enterprises which are trying to establish branding. However, besides core technology, achieving business branding breakthrough is the best short-cut for Chinese enterprise to get into global market. It also is the best choice for Chinese enterprise in order to have better affect.

Recently, more and more enterprises and entrepreneurs have realized the importance of branding. They meanwhile had so many hard works on achieving their branding strategies. However, according to the fact, there are just few Chinese enterprises have strong brand influence in China, and even less in worldwide. So many entrepreneurs consider branding is just a piece of accessory. It is one thing can be ignored after they invested so many resources and saw profits from the market. Actually, brand establishing is science and a piece of art. Only distributing resources when enterprise put branding as a main topic in strategy, branding is able to have maximum contribution on the development of enterprise accordingly. Therefore, we not only need to have a better consideration during progress, but only need to re-consider and have a better conclusion. Finally, there is a question need to be asked by all Chinese enterprises and entrepreneurs. Have we already known the right method of branding establishment? Or we need to have a new awareness of brand establishment?

众所周知，到目前为止，有着十三亿人口的中国，无疑已经成为了全球规模最大、增幅最快、最具挖掘潜力的市场。在这样一个新兴市场，即使遭遇全球金融危机的，商机依然无限。正因为背靠这么庞大的市场，经过三十年的改革开放，一大批中国企业已经成长和发展起来了。

但是，市场竞争不断升级，容不得中国企业有丝毫喘息的机会。随着全球化进程的加快，中国企业必须尽快做好在两条战线作战的准备。首先，外资品牌企业不断涌入本土市场，国内中高端客户不断被蚕食，部分优秀的国内企业被其吞并，对中国企业的长远发展构成了直接威胁；其次，虽然中国企业在海外市场出口节节攀升，但苦于核心技术和成熟商业品牌的缺失，基本只能以贴牌的方式占有大量的低端市场。

中国企业在海外市场的激烈竞争，只是国内同行企业将战线拉到海外去打，除了占有市场和扩大规模之外，并没有新的变化。总的来说，无论是本土市场，还是海外市场，中国企业都必须在核心技术和商业品牌上下功夫，否则，我们将只能停留在全球价值链的最低端，一直赚取最微薄的利润，永远都无法进入全球主流商业社会，这显然不是我们所愿意看到的。

那么，中国企业该如何突破“核心技术和商业品牌”这两个瓶颈呢？客观地讲，在核心技术方面，构造竞争优势，需要大量资源的持续投入以及大量的基础投入，厚积才能薄发，创新需要厚度，短时间内很难实现超越；而在商业品牌方面，最难在于商业伦理的遵守和核心价值的坚持，国内是一种不成熟、不规范的商业环境，对于中国企业打造品牌显然也是不小的挑战。但是，相对于核心技术而言，实现商业品牌突破是中国企业融入全球化市场的最佳捷径，也是中国企业最智慧的选择，可以达到“四两拨千斤”的效果。

现在，有越来越多的企业和企业家已经意识到品牌的重要性，也付出了相当的努力。不过，从实际效果来看，具有全国影响力的品牌还是比较少，具有全球影响力的品牌更是屈指可数。很多企业家在投入相当资源之后，看到在市场所收获的效果甚微，继而把品牌建设当作花瓶看待，视为可有可无的一项工作。其实，品牌建设是一门科学，也是一门艺术。只有当企业真正把品牌放到战略的位置上来分配资源的时候，品牌才会为企业发展做出巨大的贡献。因此，我们在经营过程中，不但要深思，而且要持续地反思和总结。中国企业和中国企业家们应该问问自己，我们是不是掌握了正确的品牌创建方法呢？我们是不是自觉或不自觉地步入了品牌创建的误区呢？

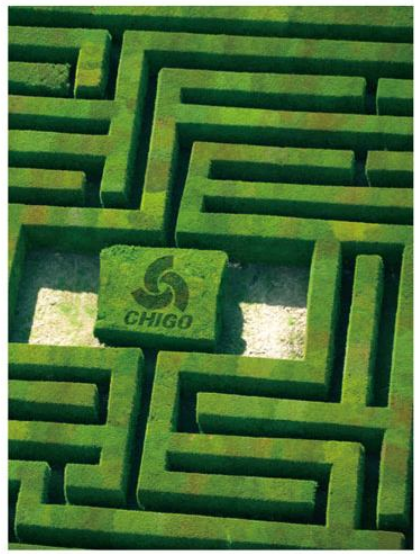
一、规模小，不是忽视品牌建设的理由

在我们很小的时候，我们的父母就身先示范，教育我们做好人，做人要厚道，做事圆满，多与人为善，为我们人格塑造和形成创造良好的环境。长大以后，我们渐渐懂事，如果要在亲朋好友、同事邻居之间建立好的形象，就必须从每件小事做起，长年累月地坚持，从而获得大家的认同。

建设企业品牌，也如我们经营个人品牌一样，必须从规模很小的时候就做起，规模小不是忽视品牌建设的理由，品牌的形成，也就是这企业通过产品和服务，将它的核心理念不断扩散出去，让更多的人普遍认知，日积月累，从而形成真正根深树大的品牌。只是规模小和规模大的时候，品牌管理策略有所差异，资源运用方式有不同，但核心原则和核心价值是一直不变的。譬如，沃尔玛创始人在他的企业很小的时候，就将平价理念和优质服务理念灌输到他的企业品牌当中；IBM的创始人也在一开始就将尊重和服务顾客及员工的理念融入到它的企业品牌当中。

二、资源少，不是拒绝品牌投入的理由

虽然中国的商业环境，各项法律法规都还不完善，执法力度和执法方式也有待完善。但是，真正追求卓越、渴望走向全球市场的中国企业和中国企业家。在品牌建设方面，应该量力而为地开始，不能最大限度减少资源投放，也不能毕其功于一役，奢望品牌在一夜之间速成。这两种情况，都是在走极端，肯定是无法获得品牌收益的。



1.There is no reason to ignore brand establishment even for small enterprises

When we were young, our parents always taught us to be responsible and kind for everything in order to create good personality and image. After grown up, we have learnt how to achieve it. For creating and establishing good image in front of friends, family, colleagues and even neighbors, we need to pay more attention on every single detail and insist what we believe. By doing this, we can finally be identified by every one.

Enterprise brand establishment is the same as running your personal branding. We have to do it from very beginning. Small size of your corporation definitely is not an excuse to ignore brand establishment. In order to create brand image, enterprise needs to deliver its core theory and knowledge by offering product and service to every one. Finally, having long-term effort is able to create a unique and effective brand image in the market. Precisely, different size of corporation needs to have different brand management strategy to match up. Furthermore, resource operation also will be different regarding to the situation. However, core business principle and core business value have to be insisted from the beginning. For instance, when the founder of Wal-Mart was young, he put low price and outstanding service as two main principles into his enterprise branding. In addition, the founder of IBM put the principle of respecting and servicing both customers and employees into his enterprise branding.

2.Less resource is not the reason to refuse the investment on branding

Although the Chinese business environment and the various laws are not integrity, and so many things are waiting to be accomplished, there are still many good enterprises and entrepreneurs are wishing to get into the global market so bad. Therefore, all enterprises need to do the best from the very beginning in terms of brand image establishment. However, it is not good to minimize resource investment on branding. In addition, putting everything on brand image establishment, and hoping brand image can be success in one day are also not suggested. Both of the considerations are not going to make it success, and gaining the outcome of branding.

Furthermore, we can not consider "try you best" is the same definition as "whatever". We have to work by the rule and principle, and having appropriate resources on brand image establishment. Keep investing resources, and investing into target market and important aspect are the keys of being success. Bear in mind, entrepreneurs and board members should never blindly invest too many resources only for competing with competitors on brand establishment.

3.By using media is not the only way to deliver your brand image

This is a new generation with the Internet. More and more media and communication channels have been appeared in twenty first century. Therefore, there are many Chinese enterprises pay more attention and energy on deliver their brand images. Although many low cost communication channels are able to increase enterprise brand awareness quickly, the most of enterprises are wishing to increase their brand awareness and sales through the methods such as event marketing and news media. Regarding to event marketing, replacing letters by news definitely is one of the most effective ways.

To all consumers, every one would like to believe news rather than enterprise documents and coercive advertisements no matter through traditional newspaper, TV or the Internet. For instance, people will change channels or go to toilet when ads on during a TV show. Advertising will always be ignored when people read newspaper. Moreover, advertising web window will be closed immediately when it pops out. Therefore, news is still the best way to deliver brand image.

In addition, the various forms of advertisement and media have their unique effectiveness and importance. For instance, lance, knife, sword and arrow as weapons they have different sizes and shapes. However, they all have the unique functions and advantages. Therefore, no matter what kind of method is used to deliver brand image, we are not just looking for quantity. Most importantly, we should never blindly add to many communication channels for delivering brand image.

As smart entrepreneur, we need to choose communication channel by targeting our own brands. Moreover, we need to consider what communication content needs to be delivered

在这里，我们不要将“量力而为”理解成“可有可无”，而是指按照一定比例和原则投入资源进行品牌建设，一定要持续的投入资源，重点市场重点投入，关键环节重点投入。要切记的是，我们的企业家和经营层，也不能盲目与竞争对手拼绝对总量的品牌资源投入。

三、传播多，不一定就是好的品牌积累

进入互联网时代之后，传播媒体和传播的方式越来越多，许多中国企业都开始重视品牌的传播。现在，也有很多种成本较为低廉的方式，能够快速有效地提高企业品牌知名度。当然，大多数企业都倾向于事件营销和新闻传播的方式来提升品牌和销售。相对于事件营销而言，以新闻代替软文，无疑是最为有效的方式之一。

对于广大消费者而言，无论是传统的报纸还是电视和网络，大家都愿意相信新闻，很少人会相信企业的软文和硬广。譬如，播放电视节目的途中，一插播广告，不是换台，就是上厕所。在看报纸的时候，看到广告和软文，立马就翻过去。看到弹出的网页广告，大家也是马上就关闭它。所以，新闻是最有效的品牌传播方式之一。

另外，不同的广告形式和传播媒体，它们的作用都是不可或缺的，各有各的用途。就如长矛、佩剑、匕首和弓箭一样，各种武器中，各有所长，也各有所短。但是，不管何种

to the market by referring to core brand principle and core business value. There are many considered low cost communication channels might not able to help in terms of brand image establishment. Some of them even have negative effects. Therefore, brand image delivery needs to be operated by request. Enterprises need to figure out the key point between enterprise brand requirement and customer needs.

4.Brand image building could not be done in short-term

Regarding to Philip Kotler's 4P or 4C Marketing principle, there are not many details or descriptions about the topic of brand image. However, during the process of actual business operation, there are many enterprises and entrepreneurs consider the effectiveness of marketing and promotion can be the tools for establishing their brand images. These enterprises and entrepreneurs need to gain profits immediately once the resources have been invested when establish their brand images. Moreover, they expect the market can respond and provide feedback to them immediately. And hopefully the investment can be effective in short-term. Otherwise, they will stop investing resources on branding and advertising if the effectiveness is not that obvious. Afterwards, the most of resources will maximally be invested back to various promotion activities. It makes brand image establishment can not move on anymore.

According to the understanding of the writer, there is no such short cut in order to create your enterprise brand image. Moreover, brand establishment can not be done in short-term. Therefore, we have to build up good foundation from very beginning in order to let your branding become success. By doing this, you are able to make your brand finally become one of the best known brands in the world. Branding are the symbols of royal and identity. It also represents taste and quality. Therefore, some simple promotion activities such as discount and promotion are able to increase the sales in short-term indeed. However, they are not able to increase your brand awareness during the establishment. For instance, the well-known international enterprises they are not just competing with their main competitors by offering low price. Because they realize that branding is the most important issue in their strategies, only a successful brand can put them on the way to success. Some of the entrepreneurs would not even consider too many short-term profits. Because they know that using low price to gain market share is going to destroy brand image.

Actually, within a strong competitive industry such as home appliance, there are so many enterprises have already realized the importance of brand image building. If enterprises just use some promotion activities to gain market share and increase short-term sales, they are only able to gain some short-term profits as return. Therefore, the enterprises can never achieve business upgrade if brand establishment is ignored. In addition, if enterprises are not able to keep gaining reasonable profits, technology innovation and brand establishment can not be achieved due to lacking of resources. Therefore, it will cause a negative circle. If business can not

品牌传播方式，我们不要贪求传播数量，更不要盲目地增加品牌传播点。

我们要根据品牌的定位来选择传播渠道，要根据品牌的核心理念和核心价值来量身度造传播内容。很多看似成本低廉的传播方式，对于你的品牌塑造来讲，可能毫无益处，甚至可能起到负作用。品牌传播，一定是按需定制，要在企业品牌诉求和顾客需求之间找到关键点。

四、短平快，不是建设品牌的指导思想

在科特勒关于营销的“4P”或“4 C”概念中，没有对品牌作系统的阐述。但是，在实际的经营过程当中，很多企业和企业家把其中的“推广和促销的作用”理解成了“品牌建设应该起到的作用”。这些企业和企业家在主导品牌建设的时候，一考虑投入资源，就需要马上得到回报，需要市场立马反应，销售立竿见影。如果不能取得这种效果，马上就会砍品牌广告的投入，继而把资源大量投入到促销赠品和促销活动中去，企业品牌建设就此搁浅。

按照笔者的理解，打造企业的品牌，绝对不能有短平快的思想，更不能以此为品牌建设的指导思想。真正成为口口相传的好品牌，需要扎扎实实地做好基础工作。品牌是贵族身份和地位的象征，也是品质和品位的代名词。简单地通过赠品和促销活动以及直接的降价，可以短期内提升销量，但对于品牌的建设功劳极微。所以，国际名牌，很少跟国内企业拼价格，因为它们深得品牌经营的真谛。它们甚至不会因为追求一时一地的市场份额而自损品牌，拒绝短期利益的诱惑。

be upgraded, it is impossible to achieve enterprise brand image upgrade.

Within this issue, the writer discussed the four points which Chinese enterprises should never come across when establish their brand images. Frankly, Chinese enterprises already have some know ledges and awareness in terms of brand innovation, brand insist, brand royalty, etc. however, for achieving branding strategy we are still at the first level. Furthermore, regarding to brand establishment, the brand management departments are still fighting alone within many enterprises. However, the rest of departments did not even realize their own responsibilities. Therefore, an outstanding brand image is not able to be established without the support by enterprise system. Finally, Chinese enterprises and entrepreneurs hopefully are able to go further. In order to achieve this goal, we need to have more times, energies and resources contributed on building brand image.

Getting into the E-generation for becoming the leader of global market is the most important assignment which needs to be undertaken by Chinese enterprises and Chinese entrepreneurs. The writer believes we are able to handle all the further challenges, and keep walking on the road of brand image establishment in order to gain the final success. By having efforts, Chinese enterprise definitely has chance to become the champion of competition. Afterwards, more and more Chinese enterprises hopefully can become one of the well known brands in the world!

其实，在中国竞争最激烈、最充分的家电行业里，已经有许多企业意识到了品牌的重要性。如果我们长期忽视品牌的建设，长期采用短平快的市场操作方式，显然只能赚取短期的、微薄的利润，肯定无法实现产业的持续升级。如果企业不能持续地获得合理的利润，哪里有资源投入技术创新和品牌建设上来，从而形成恶性的生态循环。如果无法在产业上持续升级，企业的品牌又如何能够实现持续的升级。

这里，笔者谈了四点关于中国企业在品牌建设方面的误区。其实，中国企业在品牌渗透力、品牌的亲和力、品牌创新力、品牌持久力、品牌忠诚度等方面，可能有了一定的研究，但在品牌实践上却处于非常初级的阶段。在品牌建设上，很多企业往往都是品牌管理部门在孤军作战，其它部门并没有意识到自己的责任。没有企业系统的支持，就不可能有真正成熟的企业品牌。但愿中国企业和中国企业家能够越走越远，有更多的时间、精力和资源投入到品牌研究与品牌建设上来。

真正融入互联网时代、在全球化的市场上独领风骚，中国企业和中国企业家任重而道远。笔者相信，在品牌建设的道路上，我们能够不畏艰难险阻，持之以恒地走下去。通过我们的努力，中国企业完全有可能逐步成为具有全面竞争能力的冠军，也会有越来越多的中国企业品牌将立足于全球最优秀的品牌之林！

The Maintenance of DC Inverter Air Conditioner 1, 2, 3

变频空调维修1、2、3

Written by Yu Jianqiang Oversea Technical and Customer Service Department 文/海外技术及客户服务部 余建强

The system of operating DC inverter is complicated because of the intelligence checking protector. Therefore, it causes so many difficulties on maintaining the unique product such as DC inverter air conditioner. However, there are some maintaining experiences have been provided in the below article. The writer has provided some simple maintaining methods as references in terms of look, measure and analyze.

1. Look

First of all, Looking at electric display board, the display light will be on under normal situation. Moreover, you will hear the responding sound when operated by remote control. In addition, when the fuse of switch, the transformer of indoor unit and the electric board of indoor unit are broken, the electric board of indoor unit and electric display board would not work.

Secondly, see the failure code from electric display board. The failure situations can be broken down into three main categories:

Firstly, it is the failure of air-conditioning parts, and the parts which are included as the temperature sensors of indoor and outdoor unit, the motors, four way valves, compressor, etc. Therefore, we need to check or even change the damage parts in order to solve this problem.

Secondly, it is the system failure, and the failure situations which can be concluded as system leaking, lacking of refrigerant, capillary blocked, etc. Therefore, we need to re-charge gas and clear the tube in order to solve this kind of problems.

Thirdly, it is the failure of integrity. And the problems are included such as actual power supply is higher than voltage and compressor discharging temperature is higher than the standard. In order to solve these problems, we need to check working power supply and the temperature of environment. If testing result is out of the standard, it means that is the normal protecting function of DC inverter air conditioner. Otherwise, the problem might be the air conditioner itself.

The solutions:

Power supply higher than the standard is because the damage of the controlling main PC board of outdoor unit and PFC board. Therefore, we can just easily change them for solving the problem.

变频空调控制系统复杂，智能化检测保护完善，此特点给变频空调的故障维修带来了一定难度。本文结合平时的维修经验积累，尝试提出一种较为简单有效的维修方法，即“一看二量三分析”，以供大家参考。

1、看

（1）首先看显示灯板，正常情况会有显示，用遥控器摇控会听到嘀嘀的叫声；当电源开关跳开、室内变压器、室内电控板上的保险丝或是其它硬件坏时，室内电控板不会工作，显示灯板会不显示。

（2）其次看显示灯板的故障代码。通常故障分为三类：

一类为元器件故障，包括室内、外管温和室温传感器、室内外电机、四通换向阀、电子膨胀阀、压缩机等，此类故障通过检测、更换元器件予以解决；

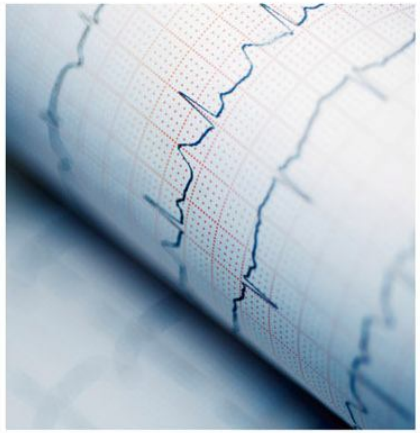
二类为系统类故障，包括系统泄漏、缺氟、毛细管冰堵等，此类故障通过检补漏、充氟或排除管路堵塞予以解决；

三类为综合性故障，包括整机供电的过电压、过电流、压缩机的排气温度过高保护故障。此类故障先要检测工作电压和环境温度，如超出正常的范围则判断是变频空调正常保护功能。如果检查出在正常范围内，则判断空调器故障。

The failure of voltage is because of the damage of the controlling main PC board of outdoor unit, IPM and compressor. Thus, we can just change those parts one by one in order to solve the problem.
Compressor discharging temperature too high probably is because too many refrigerants have been injected. Moreover, refrigerant mixing with air could also be the reason cause the failure. Besides, capillary blocked and the failure of valve and sensor also are the main elements of making temperature high. Therefore, finding out the exact failure part is able to fix the problem.
Finally, looking at the working situation of connecting pipe is necessary. Under the normal working situation, the outdoor part of connecting pipe is bit cool, and there will be some bead on the pipe. In addition, if capillary has frost on it, it means capillary is blocked or lacking of refrigerant. Therefore, re-charging refrigerant and cleaning capillary are able to solve the situation.

2. Measure

First of all, measuring resistance is the first step of measuring process. Normal motor, the compressor of DC inverter, four-way valve and the other valves all contain brass coils. Therefore, measuring resistance and comparing with the standard are the ways of identifying the problem. For instance, open circuit and short circuit can be identified as the problem of parts damage or aging.
Bear in mind, there is an electric board inside direct current motor. Therefore, the resistance which needed to be checked is the resistance of electric board rather than the resistance of motor coil. We need to measure the resistance between earth wire and terminal by using the second level of multi-meter, and comparing actual number and the standard. If open circuit or short circuit is happened, we can consider it is the problem of the damage of the PC board of motor inside.
Regarding the IPM module, we need to measure the resistance between the terminals of P and N and the terminals of U, V and W by using the second level of multi-meter. Comparing with the standard, if there is a huge difference as open circuit or short circuit, we can consider that is the problem of internal damage.
Moreover, measuring voltage is able to allocate the problem. The controller of outdoor unit contains main PC board, power supply board, IPM module board, etc. Therefore, we need to measure voltage by identify the problem of the PC board in order to analyze and make decision. The route of power supply: alternating voltage (220VAC) outlets direct voltage (280VDC) via PFC board. Furthermore, it finally outlets low voltage (15VDC, 12VDC and 5VDC) via main PC board or the switch of the module.
The test of PFC board: if inlet alternating voltage is normal (220VAC), and outlet PN terminal does not have voltage, we consider it is the problem of PFC board. Furthermore, the problems are included such as the damages of the bridge and IGBT.



A、 过电压故障通常因为室外控制器主板、PFC板（即功率因素调整电源板）元器件老化引起，更换主板或PFC板解决；
B、过电流故障，与室外控制器主板、IPM模块板及压缩机老化有关，可逐一更换解决。
C、压缩机排气温度过高保护故障，可能的原因为冷媒过多、冷媒中混有空气、毛细管堵塞或电子膨胀阀故障关死，传感器失效等，此故障通过逐一检测排查予以修复。
（3）最后看连接管状况，正常制冷情况，室外部分的连接管较凉，铜管上有冷凝水珠。如果细管有霜，说明冷媒不足或存在毛细管微堵。此故障通过补充冷媒或疏通毛细管来解决。

2、量

（1）首先量电阻。普通电机、变频压机、四通阀、电子膨胀阀内部均有铜制线圈，测量其端子电阻，与标准值比较如相差太大，比如开路或短路，一般为老化或烧毁损坏故障。
——直流电机内部嵌有电控板，所测各端子间的电阻实际是电控板端子电阻，不是电机线圈电阻。一般将万用表旋到二极管测量档，测量地线端与其它端子间正反向电阻，与标准值比较如相差太大，比如开路或短路，一般为电机内部电控烧毁故障。
——IPM模块，一般将万用表旋到二极管测量档，分别测量母线电压输入端子P、N端与三端电压端子U、V、W之间的正反向电阻。与标准值比较，如相差太大，比如均为开路或短路，一般为内部烧毁故障。
——其次量电压。室外控制器通常由主板、电源板和IPM模块等电控板组成，要具体判断哪块电控板故障，有时须要测量电压才能分析判断。其主要供电路径为：交流电压（如220VAC）经过PFC板输出为直流电压（PN端280VDC）,再经过主板或模块板上的开关电源转换为低电压（15VDC,12VDC,5VDC）。

The tests of main PC board and module board: if inlet voltage (280VDC) is normal, and the outlet voltage of switch power supply is zero, we need to consider the damage of main PC board or the power supply of module board. The damage situations such as the chip of switch power supply and the manostat are broken.
Secondly, measuring the voltage once again is able to have a further check. Operating voltage too high is because of outdoor temperature is too high, having too many refrigerants or mixing with air and finally the damage of compressor. Therefore, we need to check inside all the aspects in order to identify actual problem.
Finally, measuring the pressure is the final step of the measuring process. First of all, measuring the balance pressure under stand by situation is able to judge whether leaking or having enough refrigerant. Moreover, measuring both high pressure and low pressure under operating situation is able to identify the further problems. For instance, if high pressure is over the standard, we consider the problems are included such as outdoor motor does not work properly, outdoor temperature is too high, condenser is dirty, the hole of electric valve is too small and capillary blocked. In addition, if low pressure is less than the standard, the problems probably are included such as lacking of refrigerant, indoor motor does not work properly, and evaporator is dirty. Therefore, we can identify the actual problem by checking the situations one by one.

3. Analyze

Regarding to the maintenance of DC inverter air conditioner, we need to analyze them integrally because too many components might be included for some problems. For instance, the communication problem of indoor or outdoor unit is one of typical DC inverter problems. This problem contains the components such as indoor electric board, indoor connecting wire, outdoor terminal board, outdoor electric board, outdoor electric wire board (PFC board) and the motor of outdoor unit. For solving the problem, we need to firstly check the wire of indoor terminal board whether is correct or loose. Afterwards, checking the direct motor of outdoor unit whether is correct, checking outdoor electric wire board whether outlet direct voltage, the switch power supply of outdoor electric board whether has the voltages with 12V and 5V, the wire of indoor unit whether is disconnected and finally indoor electric whether has problem or damage. We therefore need to analyze and test them step by step for maintaining.
Considering the maintenances of DC inverter air conditioner are difficulty and complicated, some problems need to be double checked in order to analyze and make final solution. The methods which have been provided above are based on the personal opinion and experiences. The backups and any ideas are welcome to be provided anytime and anyplace.

A、PFC板测试：如输入交流电压正常（如220VAC），输出PN端无电压，则判断PFC板故障。可能的情况为整流桥、IGBT等烧毁损坏；
B、主板或模块板测试：如输入电压（PN端280VDC）正常，开关电源的输出电压为零，则判断主板或模块板上电源部分损坏。可能的情况为开关电源芯片、三端稳压器等烧毁；
（2）再次量电流，整机运行电流过大与室外环境温度过高、冷媒过多或混有空气、压缩机老化故障有关。可以逐一检测排除。
（3）最后量压力 先测量待机状态下的平衡压力，此值可判断冷媒是否充足、系统有否泄漏；再测量制冷状况高、低压值。如高压过高，一般与室外风机停转或转速低、室外温度过高或冷凝器过脏、电子膨胀阀开度过小或毛细管微堵等有关；低压过低，一般与冷媒过少、室内风机停转或转速低、室内蒸发器过脏有关。可依不同故障现象逐一排查。

3、分析

对于变频故障的维修，有些故障涉及的部件较多，需要综合分析判断。典型的有室内外通讯故障。此故障涉及的范围有室内电控板、室内外电缆、室内外端子台接线、室外电控主板、室外电控电源板（PFC板）、室外直流电机。检查顺序为室内外端子台接线是否正确或有否松动，室外直流电机是否正常、室外电控电源板有否直流电压输出（如输入交流220V，输出PN端为直流280V）、室外电控主板上开关电源是否有12V、5V电压、室内外电缆是否断开、室内电控板是否故障。根据每个环节的测试进行判断维修。

考虑到变频空调维修的难度和复杂性，有些故障需要反复检测分析方能解决。以上所述仅为个人浅显的经验和想法，不足的地方欢迎大家予以完善和补充。

From Today On
从今天起

Written by Hufeng, from PR department　文/公共关系部 胡凤

A famous poet ,Haizi said, from tomorrow on, face the sea with spring blossoms.

At that time, I was still young, worshipped those verses, and regard it as the motto of life. Afterwards, my teacher explained, at twenty-five the poet put an end to his life by lying on the rail. All longing and efforts for happiness, can not start from tomorrow. Tomorrow is too variable, which means to maintain the status quo today yet. So, for tomorrow's happiness and ideal, why not start now to begin building.

Many times, we determine in the heart again and again, from tomorrow on, I want a good workout, from tomorrow on, I will no longer play games，from tomorrow on, I want to correct bad habits… But when the future time become today: it rains, we postpone our exercise plan. Be bored, play a game for a while; as the bad habits, impact is not a big problem, just put it by for later .Then all the plans envisaged strand again, and finally become a beautiful talk.

Our expectant bright future is not a mirage floated in the mid air. All poets who regard dream as horse will come back to real life at last. Because only rooting in the soil can a dream burgeon forth quickly. And the basis of making this dream a reality is not a step you will go in the future, but the way at your feet. Maybe you feel hard, need to give yourself a buffer, then please start from a small change, use yesterday as a benchmark to compare with this change, don't repose your action in tomorrow that maybe never arrive.

Hence, please change tomorrow in the poet to be today. From today on, to be a happy man. From today on, care about grain and vegetables. From today on, get in touch with very relative and tell them of my happiness.

Blossoms sea is just at the moment, under your feet.

海子说，从明天起，面朝大海，春暖花开。

那时候尚且年少，听到那些诗句，一下子崇拜得五体投地并引以为人生格言。后来老师在讲解的时候，说到这位诗人在25岁的时候就卧轨自杀了，不禁唏嘘。原来所有对于幸福的憧憬和努力，是不能从明天起的。明天存在太多的变数，意味着在抵达之前的今天，仍然选择维持现状，所以，这种明天起的新生式幸福和理想，为何不从现在就开始着手构建。

其实许多时候，我们也会在心里一再地下决心，从明天起，我要好好锻炼身体，从明天起，我不再玩游戏，从明天起，我要改掉多少多少的陈规陋习……但是，当这个未来时间成为今天的时候：下雨了，推迟一天再锻炼吧；无聊了，还是再玩玩游戏吧；陈规陋习嘛，不是没有影响到什么吗，以后再说吧。于是所设想的计划一再搁浅，终成为一句美丽的空谈。

我们所期许的美好愿景，不是一座悬浮半空的海市蜃楼。所有以梦为马的诗人，也都会泅渡到生活的现实里来。因为只有落脚在现实的土壤里，梦想才会迅速的生根发芽，而让这个梦想成为现实的依据，不是你未来将走的某一步，而是你当下正在踏经的路程。或许你觉得艰难，想给自己一个缓冲，那么也请你以微小的改变为开端，请以昨天为标杆来比对这种改变，而非将行动托付于可能永远无法抵达的明天。

所以，请将诗歌中的明天改为今天。从今天起，做一个幸福的人。从今天起，关心粮食和蔬菜。从今天起，和每一个亲人通信，告诉他们我的幸福。

花开成海，就是当下，就在脚下。

Running like the youth
像少年一样飞驰

Written by Chen jian from Technique Support Dept. 文/技术支持部 陈健

I bought a bicycle, which had a simple and rounded line, just look like the outline of the gallop, I was fond of the shape when it moved.

Every sunny morning, I would like to ride to work. In particular, when I watch the sun on the bike, I am willing to believe that the world is beautiful, it is great. I always remind myself that there are many wonderful things waiting for me to meet, and I do not need to make money as the entrepreneurs, who have to keep running by Benz or Land Rover. Although I am an inappreciable staff, I also have the intersections and my own distance to go. Now I am on the road for make a living or survive. To make my life more beautiful, I try to work hard. When riding my bicycle, I enjoy listening to the wind with my young dream and towards the beautiful and strange.

In fact, I could dream without cycling. I could follow my heart and dream of traveling over the sea, to the southernmost tip

我买了一辆单车，有着简约圆润的线条，恰似奔马的轮廓，动起来的时候有我喜欢的样子。

但凡每一个阳光明媚的早晨，我都喜欢骑着它去上班。特别的是，骑在单车上看着太阳，我愿意去相信世界是美丽的，这种感觉真好。我一直提醒自己，这世界上有很多美好的事物等待着我去遇见，而我暂时并不需要像一个大企业家那样骑着奔驰或者陆虎去奔命赚钱。虽然只是一个小职员，我却有自己想去的路口和远方，如今为了生活或者生存，我才在路上。为了使我的生活变得更加美好，我才努力去工作，骑着我喜欢的单车，怀揣着年轻的梦想，朝向美丽而陌生的前方，聆听随风，与梦同行。

其实，没有单车的日子，是可以做梦的。我可以白日坐地，梦里绕它千百丈，神游万里，随心之所往漂洋过海，去南非最南端的好望角与善良淳朴的土著居民交易那种叫做天使之翼的贝壳，或者索性上岸去被珊瑚礁环绕的哥特式教堂里朝圣，顺便和岛上据说是欧洲移居过来的传教士后裔谈论一下当地的风土人情，闻一下用珊瑚岩浇筑的墙壁上海水和日落亲吻过的味道。又或者，在受尽诽谤和奚落的时候去认真等待一个寂寞袭来的夜，什么都不要想，为自己写下一个

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Every sunny morning, I would like to ride to work. In particular, when I watch the sun on the bike, I am willing to believe that the world is beautiful, it is great. I always remind myself that there are many wonderful things waiting for me to meet, and I do not need to make money as the entrepreneurs, who have to keep running by Benz or Land Rover. Although I am an inappreciable staff, I also have the intersections and my own distance to go. Now I am on the road for make a living or survive. To make my life more beautiful, I try to work hard. When riding my bicycle, I enjoy listening to the wind with my young dream and towards the beautiful and strange.

In fact, I could dream without cycling. I could follow my heart and dream of traveling over the sea, to the southernmost tip more often, just like a young pet and a token for the innocent age, also it is nothing to do with the driving skills. I like my bike, not to mention the back seat that carrying the dream of a little boy, lonely and proudly striving in the months and years.

When I was young, what I dream was always about chase the pace of the dawn by mountain bike, running on the romantic mountain in Xishuangbanna, stepping on the maple leaves, to encounter a beautiful woman who is pursuing her dream. Then holding together and growing into a tree, thus weaving a beautiful dream? This dream is really beautiful, it is so beautiful that I could not make sure.

The day when I was young, chasing the bright times all the way, the speeding bicycle was running the years under the sunshine to the top of our bent.

However, the youth is after all so beautiful, but the dream is really too short, I have to ride my bicycle to move forward in my dream. To continue to run like a youth, songs with me, this process must be beautiful.

I still remember, when graduated from the college, the final gathering like the roller coaster before dusk, circling around and around. It kissed the sky of the ivory tower wildly and quietly, we could not tell the taste. The final carnival was nothing to do with the pain. See many of my friends were still hovering on the walkway with inexplicable sadness, I could only leave an indifferently eyesight, then leave away with a light smile. . . . After having a dream you knew everyone is the transient guest, sadness and joy as it is.

真等待一个寂寞袭来的夜，什么都不要想，为自己写下一个单纯的犯错借口。然后把自己胡思乱想的片段涂在大腿或者手臂上，自然的睡着，天亮的时候困醒了再不经意的去淋浴间洗个澡，然后找一个安静的房间认真做梦，不要很大，干净完整就好。

这些白日的梦近乎真实一般具体，唯美纯粹得一塌糊涂却又虚实皆无。也许，我们都向往远方，但都不曾远离。因为放不下，去不了？如果说，跑车是风一样男子的坐骑，那么单车于我，更多时候像是少年的爱宠，一个纯真年代的念想信物，与车技无关。我喜欢我的单车，何况后座上承载着少年的梦想，飞驰在寂寞而骄傲的奋斗年月里。

曾经少年，梦里想的都是骑着挂挡的山地车去追逐晨曦的步子，飞驰在西双版纳山花浪漫的山路上，踏着经年留下的红叶，去邂逅一个寻梦的美丽女子，然后抱成一团，长成一棵树，编织一个绮丽的梦？ 这梦真美，美得我都不敢确定。

与青春有关的日子，追逐着一路的明媚年华，飞驰的单车在阳光灿烂里纵情的转动着岁月的光影。

然而，少年的时间毕竟太美，这梦着实太短，我得骑着我的单车在梦里继续向前，继续像少年一样飞驰，且歌且行，这过程一定很美。

我还记得，临近大学毕业的时候，最后的聚会像黄昏前的过山车，一圈接着一圈，狂热而安静的吻别象牙塔的天空，说不出的滋味。最后的狂欢，当是与痛无关。看到我的很多朋友还徘徊在摇曳着莫名忧伤风铃的走道上，我只能留下一个风轻云淡的眼神，然后浅笑着离开。。。。梦过当知身是客，心无增减，苦乐随缘。

如今我已南下，接过母亲的叮嘱，告别乡土，骑着单车身轻似鹄。我想该在心里好好捋一份清单，人物、路线、站点，随心期待。。。。

一路下来，听说很多。听说南方边城里的风信子开了，最美不过。我的朋友九公主小美比我先一步南下，她说她喜欢这里的风信子。我看它的美果然是明媚的。爱此花者定然也该是幸福如花的。兄弟Z打来电话说，Jian, 我要辞职了，去嵩山少林罗汉院习武清修，跟兄弟伙的道个别，别太惦记。我说，好，兄弟等你，等你出来后南下找我，费用全

Now I am in the south, taking mother's exhortations, and bidding farewell to my hometown, riding the bicycle lightly as a bird. I think that I had better form a list in my heart, characters, routes, stations included, I am expecting.

I heard a lot all the way. I heard that the Hyacinth in the southern border was blooming, what the most beautiful time. My friend, Princess Nine went to the south before me;she said that she likes the hyacinth here. I found the beauty of it is really bright. The one who love this flower will certainly own a happy life as the blossom. I believe.Brother Z called to said that, Jian, I will quit my job and to be secluded in the Congshan Shaolin Monastery. Now say goodbye to the guys, do not miss. I said, well, I will wait for you, when you come out, seek me in the south, all-inclusive cost are mine, remember to practice the song sang by Xu Wei "the forepassed you". Hoping a chance to chorus with you, drinking with big bowls, not drunk endlessly as well. I also heard the rumors that after the Yushu earthquake, Foshan may move, suddenly, as if the earth is becoming increasingly dangerous. There was a period of time, walking alone on the strange street, for lacking of the sense of security;I expect to make a pair of wings to my bike. But I found out soon that I could not borrow wings, so there are only adamancy and running. I still remember, one day after the quake, the company ask for contribute money to the Yushu people,I remember that I would like to donate 5 dollars to disaster victims, but I found only a sheet of 10 yuan, 20 yuan and two sheets of 1 yuan in my purse, it is embarrassed to ask the clerical staff to give me the change. The thought of brothers and sisters in Sichuan who still in the miserable situation touch me, so I have decided to donate 10 dollars. By the time, my only bank card has no two integers, and wages have to wait 1 more week. The donation is less, but it is mine.

In this way, I rode my bike, I kept listening and walking. When I felt lonely, I thought about leave occasionally. Maybe, I'm just a seed of the dandelion. But I really do not want to leave. I also imagine that I am the same as the four-leaf clover, stand strongly in South Chinese Sea, sprouting and blossoming. . . . . I know adapt and change is a tug of war game which has a limited time. You have only two results, going home smartly, or out lonely.

Sometimes, in order to chase the distance of the sun, I tight my shoelaces deliberately in the beginning, when riding the

包，记得练练许巍《曾经的你》，盼个机会找你合唱，还要大碗喝酒，不醉不休。我还听说玉树地震后佛山也可能会动的谣言，突然感觉地球好像变得越来越危险了。有那么一段时间，一个人走在陌生的街道上因为安全感的缘故恨不得给单车插上一对翅膀但是我很快发现我是借不到翅膀的，所以只剩下坚强和奔跑了。我还记得地震后的某一天公司发出号召向玉树人民献爱心，我记得我掏了一下荷包，想给灾区人民捐5块钱但是我发现荷包里只剩下1张10元、1张20元和2张1元的人民币，总不会叫文员给我找钱吧。再一想到四川亲密的阶级兄妹还处于国殇家破的境地，于是索性捐了10元。而此时我唯一的银行卡里已经没有两位的整数了，发工资还要等1个星期。这钱不多，却是自己的。

就这样，我骑着我的单车，听说着，行走着。孤单或者落寞的时候，偶尔也假想过离开进行着。也许，我只是一枚蒲公英的种子。但我确实不想离开。我也想像四叶草一样，坚强的站在南海之滨，落地生花。。。。。。我知道，适应与改变是一场限时拔河赛，要么潇洒归位,要么落寞出局。

有时候，为了安心追逐远方的太阳，我刻意把鞋带系得很紧，骑着单车狂奔的时候，鞋带还是散了。我想到达目的地后再系，但我还是停了下来因为我怕摔倒后没人扶我起来去继续光荣的放逐。

蓦然回首，如今已迎面穿过南国的第一个深秋，一个人骑着单车穿过十字路口，飘过街口的环形公园。抬头间，我看见常青的园子里，漫步着青丝皓首，半开放的活动平台上

bicycle, the shoe still scattered. I would like to tight again after reaching the destination, but I stopped in the end, because I was afraid no one will help me up to continued to the glorious exile.

Looking back, I had had my first autumn in the southern, riding the bicycle lonely through the intersection, overing the corner of the circular park. When looking up, I saw the evergreen garden are full of green, on the semi-open platform dancing are flying actively. That moment, the lanterns had lighted up, when stop my bicycle, a leaf was falling down, is it like me can not help. Raising the dignity of the golden leaves, at the back of flourish, I see through the loneliness, the touching moment is distinct and clear, deeply into the bone marrow. Perhaps putting down is the birthmark of lonely, but the leaf is light, like the butterfly, that read the interpretation of Fruitful cycle with aesthetic. Waltz to stop the song is not enough, skipping dawn until sunset, then the

dancers smile and leave the mask. Everywhere are the springs, while bow your head you are in the autumn. Time goes by, people are floating in the world, by asking how many springs? Think about that, why not sing a song till dawn by the light, while you are in the best time of your life.

I heard a man outside alone is not easy, when face the reality, you can learn strong and brave gradually. Trouble is a friend. Since life do not believe in tears, then grasp your time quickly and enjoy your life with the one you like or you care about! I would like riding a bicycle follow my feelings, to see all the way fine, only for delighted without regretting in my life.

Years later, I would like to tell this story to the passerby: there has a sea in the south, there has light on the sea ,I am under the light. I want to be the boy, running and running. . . . It is like the flowers blossoming on the sea, starting from the Cape, roving, till to the end of the World.

舞曲飞扬。此时已是华灯初上，单车停下的时候，一片叶子倏的滑落下来，许是和我一样情不自禁。举起这金黄得高贵的叶子，光华背后，我看透了寂寞的纹路，触摸的刹那，分明又清晰深刻得入人骨髓，也许放下是寂寞的胎记，但是一叶翩然，亦如蝶舞，演绎着春华秋实的唯美轮回。这一曲华尔兹足不停歇，跳过日落天明直到假面的舞者微笑离场。举目皆春，低眉成秋。光阴在苒，人浮于世，借问几个春秋？想一想，何不借着一世灯光，恰风华正盛，一曲到天明？

听说一个人在外面不容易，直面现实后才开始渐渐学会坚强和勇敢。Trouble is a friend。既然生活不相信眼泪，那么就抓紧时间和喜欢或者在乎的人一起做喜欢的事情吧！我愿骑着单车跟着感觉走，看一路天晴，只为今世欢颜无憾此生。

若干年后，我愿意给在路上的人讲一讲那年轻的故事：南边有海，海上有光，光里有我，我像那少年一样，飞驰呀飞驰。。。。恰似那海上花，从海角开始，流浪，只到天涯。

Look ,aren't we like twins ?
看过来，看过来，这里有苗族“姐妹花”！

Lonely boat, wide sea and clean sky ,the whole view seems very harmonious
波光粼粼，小舟独逍遥

Magnificent, isn't it ?
所谓气势磅礴，也就是这样了！

Rain is coming ,can you fell it ?
所谓风雨欲来，也就是如此了吧！

CHIGO

more than comfort

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